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Economic Efforts of Financial Crises

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The financial systems in financially distressed countries should be restructured so that banks can acknowledge and allocate losses rather than protect inefficient companies — thereby throwing good money after bad.

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Confronted with a financial crisis, governments in many developing countries protect their banks from bankruptcy by allocating resources to the least efficient debtors — loss-making firms whose bankruptcy would lead to the failure of the banking system. This crowds out efficient activities that could lead to economic recovery.

Such misallocations of resources, and the destabilizing macroeconomic forces they generate, will delay economic recovery until losses are allocated in a way that mimics bankruptcy processes.

The financial system should be restructured to curtail (through writeoffs and recapitalization)

the dependence of banks on their bad borrowers. Banks and their depositors (or an important subset of them) should be protected to avoid the monetary effects of a banking panic. But bank shareholders and managers should take their share of the losses — the shareholders by losing their investment (through writeoffs) and the managers by being removed from their positions.

Restructurings of banks should be used to bring about restructuring in the real sector: the failure of unviable firms (by foreclosing on the collateral and selling off assets) or the forced restructuring of troubled but viable firms.

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THE ECONOMIC EFFECTS OF FINANCIAL CRISES

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SUMMARY

This paper analyzes the problems that financial distress causes in the allocational efficiency and macroeconomic stability of developing countries and then explores some of the possible solutions. A country is considered in financial distress when the liabilities of institutions accounting for a substantial portion of the banking system exceed the value of their corresponding assets to such an extent that the banking system's income is not sufficient to cover its expenditures.¹ The analysis is centered on the domestic side of financial distress, which, in several countries, is associated with large external debts and lack of access to international credit and capital markets. Although most of the examples used in the paper refer to that set of countries, the analysis can be extended to the many other countries where domestic financial systems are strained although the international credit position of the country is still within reasonable limits.

The paper argues that financial distress leads to inefficient allocation of real resources and generates destabilizing macroeconomic forces that delay economic recovery. Financial distress produces such results by creating an important rigidity in the allocation of resources, which, regardless of the prevailing set of relative prices, leads resources to be allocated to inefficient enterprises. This rigidity is the tendency of banks to keep on allocating resources to loss-making debtors. Banks do this to ensure that, at least in the short-run, such debtors would not go bankrupt, causing the failure of the banks themselves. This perverse allocation of resources crowds out the efficient activities that could lead the economic recovery.

Macroeconomic instability sets in, or is aggravated, when central banks provide sustained liquidity assistance to a financial system that can no longer continue financing loss-makers and starts to have illiquidity problems. The increased monetary creation results in either balance-of-payments problems, higher rates of inflation or both. Alternatively, governments may increase protection to loss-making activities to artificially increase their profitability.

¹ Usually, banks do not reflect such situation on their books because they tend to overstate asset values when in financial distress.

Inefficient activities become profitable again and the portfolio of banks improves. But only for a short while because the set of relative prices needed to cause those effects further penalizes efficient activities, setting the country in an unsustainable path.

These effects are the result of the lack of a mechanism to allocate the losses in the economy. Such mechanism exists naturally in market economies. Firms that cannot repay their debts go bankrupt, and so do their bankers. The flow to inefficient activities is terminated, liberating resources for newly competitive activities. Most governments, however, would not allow their banking systems to fail, and rightly so because the damaging effects of such failure could be extremely traumatic and long lasting. So, they choose to ignore the losses accumulated in the banking system and, when these losses cannot be ignored, they provide unrestricted liquidity support to banks. Banks continue to allocate to their worst borrowers the resources transferred by the central bank or the government.

The main argument of the paper is that the inefficient allocation of resources that accompanies financial distress, and the destabilizing macroeconomic forces it generates, will continue to delay economic recovery in financially distressed countries until an explicit process for allocating the losses is carried out in ways that mimic the bankruptcy processes of the past. That is, the financial system should be restructured in such a way that their dependence on their bad borrowers is curtailed through writeoffs and recapitalization. Banks, and their depositors (or an important subset of them), should be protected because the monetary effects of a banking panic should be avoided. However, the shareholders and managers of banks should take their share of the losses, the former by losing their investment (through the writeoffs) and the latter by being removed from their positions.

Banks' restructuring makes sense only when coupled with a similar restructuring of the real sector, comprising the failure of unviable firms and restructuring of viable but troubled firms. The restructuring of banks can be used to cause the restructuring of the real sector through forcing banks to writeoff their bad loans. This will lead banks to either foreclose on the collateral and sell the real assets for what they can get or force the restructuring of the debtor firms, depending on the viability of borrowers.

The institutional arrangements that can be used for these restructurings, and the macroeconomic implications of both carrying and not carrying them out are developed in the main body of the paper.

I. INTRODUCTION

1.1 A country is considered in financial distress when the liabilities of institutions accounting for a substantial portion of the banking system exceed the value of their corresponding assets to such an extent that the banking system's income is not sufficient to cover its expenditures. This situation is not easily recognizable by inspecting the banks' books because, when in distress, banks tend to overstate asset values. In most cases, financial distress can be diagnosed only through indirect means, looking for certain symptoms that accompany it. Some of these symptoms, such as extremely high real interest rates prevailing for prolonged periods and large central banks' losses, are described in this paper. The diagnostic can then be confirmed with a serious review of the portfolio of the banking system, which is possible only in countries where the government has decided to confront the issues raised by the solution of a financial crisis.

1.2 Financial problems are frequently classified in two categories: insolvency and liquidity problems. Insolvency exists when the discounted present value of the income generated by assets is smaller than that of the liabilities. Liquidity problems are temporary when they arise exclusively from liabilities having shorter maturities than assets. But, illiquidity is sometimes the result of insolvency. For the purposes of this paper, liquidity problems are considered as manifestations of financial distress only when they are originated from insolvency.

1.3 A certain degree of financial distress is always present in an economy as a result of two main factors: new ventures that fail to become profitable, and old businesses that were profitable but start to make losses as a result of market changes. Such failures are positive to the extent that they reflect the continuous experimentation and renovation of an economy in expansion. The financial distress of individual firms turns into a national problem, however, when a substantial portion of the installed capacity in the country becomes unprofitable, causing a serious deterioration of the banking system's portfolio.

1.4 Underlying generalized insolvency situations is a substantial capital loss that someone will have to pay for, however ingenious the financial solution that is found. In the past, the allocation of a catastrophic loss was carried out in a straightforward way: the inability of debtors to service their debts led both them and their bankers to bankruptcy. Bankruptcy effectively solved the financial problems by extinguishing the obligations that could not be repaid. The underlying causes of financial problems were also removed since inefficient activities and firms, those that could not service their debts, ceased to exist, liberating resources for economic growth.

1.5 Presently, mechanisms to prevent banks from going bankrupt are in place in most countries. The existence of these mechanisms is a mixed blessing. On the one hand, they prevent banking panics with their dire consequences; but on the other hand, if they are not properly designed, they may also prevent market forces from solving financial problems by immediately eliminating inefficient activities and their obligations. Confronted with a financial crisis, governments in many developing countries protect their banks from bankruptcy by allocating resources to loss-making firms whose bankruptcy would lead to the failure of the banking system.

1.6 Such allocation of resources has taken two forms: (a) attempting artificially to restore the profitability of loss-making firms, by introducing quantitative restrictions to trade, price controls and other direct interventions in the price structure; and, (b) when a shift in relative prices has been inevitable, granting loss-making firms preferential access to resources, including credit and foreign exchange, frequently at subsidized prices.

1.7 The main argument of this paper is that this inefficient allocation of resources, and the destabilizing macroeconomic forces it generates, will continue to delay economic recovery in financially distressed countries until an explicit process for allocating the losses is carried out in ways that mimic the bankruptcy processes of the past. Chapter II discusses the international and domestic origins of the financial distress now affecting much of the developing world. After considering the general problems encountered in the stabilization of a distorted economy, Chapter III examines the economic effects of financial distress, focusing on the rigidity that it introduces in the allocation of resources. Chapter IV discusses the rationale for government intervention in solving financial crises, the shapes this intervention may take and the macroeconomic implications. Chapter V deals with the institutional aspects of various solutions and proposes a strategy for the restructuring of the financial and nonfinancial sectors. Chapter VI summarizes the conclusions of the paper.

II. ORIGINS OF THE CURRENT FINANCIAL CRISES

2.1 Overborrowing is frequently cited as the main cause of financial distress. Ex-post, this is a truism. Ex-ante, however, if overborrowing is accepted as a cause, it is necessary to explain why rational agents borrow beyond their repayment capacity and why rational bankers lend to them. In many countries, the structure of incentives is such that governments and public enterprises do not have checks on their deficits and will borrow as much as they can. Domestically, governments can force the financing of those deficits. Internationally, however, they have to convince foreign bankers to lend the money to them. Private

entrepreneurs always have to convince bankers that they represent a good risk. Why should bankers voluntarily lend to either governments or private agents when it is clear that they will not be able to repay?

2.2 As it is discussed later, it is only when financial distress has settled in that average borrowers have incentives to keep on borrowing beyond their means, and that average bankers have incentives to lend to them, pretending that insolvent borrowers are solvent. Before that stage, the explanation for overborrowing is that these borrowers looked solvent at the time of the lending but turned to be insolvent afterwards as a result of shifts in the profitability of their activities. Thus, the relevant question is why sudden shifts in the profitability of borrowers take place.²

2.3 Shifts in the profitability of borrowers, and therefore widespread financial distress, generally can be traced to drastic changes in relative prices. Such changes result in serious misalignments between the existing allocation of resources and that which would be consistent with the new structure of relative prices. Changes in relative prices drastic enough to render unprofitable a large portion of a country's production capacity are always related in some way either to shifts in a country's terms of trade or to the abrupt end of a long and sustained misalignment between domestic and international relative prices.

2.4 Two other factors help to generate financial distress. The first is a sudden shift in the attitude of international lenders toward a country, which, although normally caused by terms of trade changes, also adds to the effect of these changes by precluding the use of international credit to ease the balance-of-payments problems. The second is a misallocation of resources caused by political lending, linkages between banks and borrowers, and corruption.

2.5 Countries experiencing financial distress fall into two broad categories in accordance with the main factors that led to the weakening of their banking systems. In the first set of countries, the portfolio of the banking system deteriorated gradually as a result of the prolonged allocation of resources to activities that are not profitable even in relative price structures that are highly distorted in favor of the loss-making enterprises. Countries in South Asia are in this category. In the second set of countries, the portfolio of the

² Later, it is argued that the existence of ownership linkages between bankers and borrowers creates an incentive for bankers to increase their exposure in related companies beyond prudent limits. Except in cases of straightforward fraud, however, even these arrangements are created with expectations of success, and turn sour later on. As in the general case, willful overborrowing takes place only after distress has settled in.

banking system suffered a sudden deterioration as a result of the depression of international commodity prices that started in the early 1980s. Most of Latin America and Africa, and some Eastern European countries, are in this category.

2.6 Financial distress is more pronounced in the second set of countries because their domestic relative prices were deeply affected by the negative turn in their terms of trade. Furthermore, most of these countries had acquired sizable external debts during the commodities price boom of the late 1970s.³ When commodity prices collapsed, the burden of these debts became excessive overnight and international banks stopped lending to them.

2.7 The different way in which financial distress started in the two sets of countries has elicited different responses from economic agents. Because of the complication of the large external debt, and because of the dramatic nature of the shock to the banking system, people in the second set of countries rapidly became aware that the banking system was in difficulty and adapted their behavior to that knowledge. In countries where the deterioration of the banks' portfolio has been gradual, people are not conscious of the weakness of the banking system, and therefore have not yet reacted to it.

2.8 The behavior of people has created a qualitative difference between the two sets of countries because people tend to react to the knowledge of the insolvency of the banking system in ways that increase financial distress. Fear of bank failures led to capital flight, which made it more difficult for banks to mobilize resources and increase real interest rates, worsening the financial condition of debtors. Also, the widespread existence of financial difficulties created bail-out expectations and caused a relaxation of financial discipline which, in turn, further increased the banks' insolvency problems. In the countries where financial distress is more acute, it was these changes in the behavior of economic agents that turned financial difficulties into financial crisis.

2.9 This paper is centered on financial crisis. Financial distress, however, is progressive. The more losses banks suffer, the less is their ability to generate income because they command less resources to reinvest. Hence, this discussion has relevance for financially distressed countries where the insolvency problems of the banking system are not yet critical. If not corrected, the current problems of these countries will become a financial crisis.

³ In the case of the oil-exporting countries, the boom ended only in the early 1980s.

A. INTERNATIONAL CAUSES OF FINANCIAL DISTRESS

2.10 The countries suffering the most pronounced financial distress are those that borrowed so heavily during the 1970s that they were unable to service their external debts fully in the early 1980s. These countries' excessive external borrowing was in part a result of the unprecedented international shocks of the past decade. However, the fact that there are many countries that did not become entangled in debt problems shows that, although international circumstances helped to shape the crisis, it was domestic policy that precipitated financial distress.

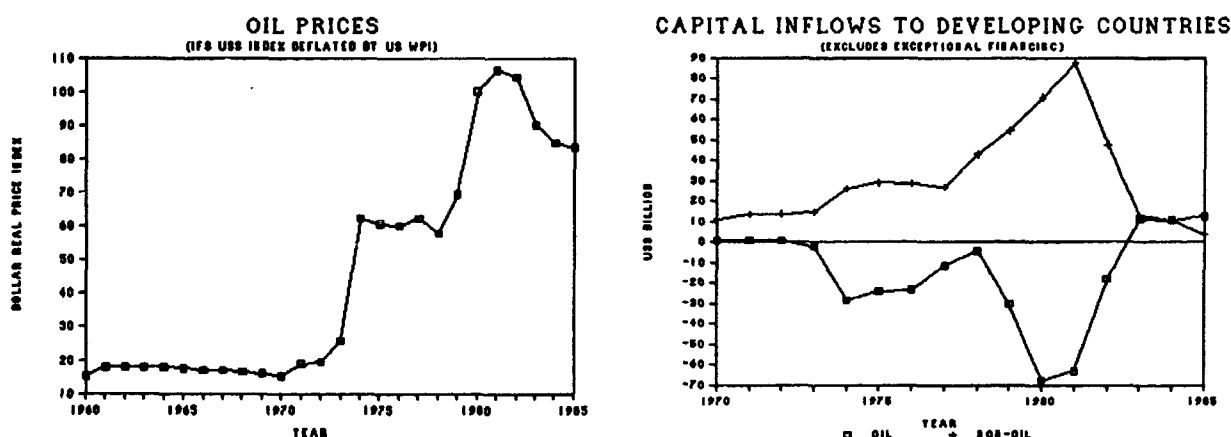
The Demise of the Bretton Woods International Monetary Framework

2.11 The stable world economic environment that prevailed after World War II came to an end in the late 1960s and early 1970s, when the rates of inflation of OECD countries started to diverge significantly, creating misalignments in the exchange rates that led to frequent and substantial devaluations, rendering impractical the fixed-exchange-rate international monetary system created at Bretton Woods. In response to those problems, the Bretton Woods system was replaced in 1973 with the current floating-exchange-rate system. At the time the new system was introduced, it was believed that movements in exchange rates were going to be determined primarily by purchasing power parities, thus becoming predictable as a function of a country's monetary and fiscal policies. Exchange rates, however, have continued to fluctuate in violent and unpredictable swings, causing international greater financial shocks than in previous decades.

The Rise and Fall of International Commodity Prices

2.12 The fluctuations in commodity prices of the past decade combined with the factors mentioned above to generate marked cycles in the current account balances of both oil- and non-oil exporting countries. The increased revenues accruing to oil-exporting developing countries spilled over their boundaries and created an unprecedented liquidity in the international banks. This liquidity did not find an outlet in the developed countries, which at the time were pursuing contractionary policies to finance their larger oil bills. Consequently, international banks turned to financing the trade deficits of those developing countries that were attempting to overcome the contractionary effects of the oil price increases through expansionary domestic demand policies. On average, non-oil developing countries incurred current account deficits that approximately mirrored the surpluses of the oil-exporting ones (Figure 1).

FIGURE 1
THE OIL PRICE CYCLE

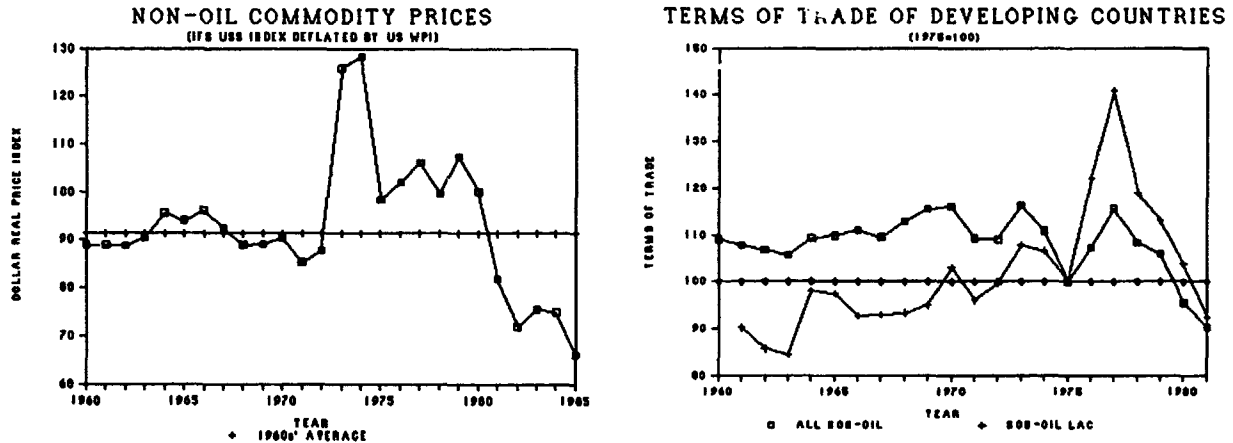


Source: International Finance Statistics (IFS), various issues.

2.13 The large current account deficits of the now overindebted countries were also a result of the temporary increase in non-oil commodity prices that took place in the mid-1970s, which improved their terms of trade right after the first oil shock (Figure 2). The price cycle of non-oil commodities had a negative effect on the finances of their exporters because it initially raised their export revenues, reducing the need for adjustment to the first oil shock and increasing their propensity to borrow abroad. The subsequent fall in the terms of trade forced an even more drastic adjustment on them, with the complications brought about by the increased stock of foreign debt. The swing in the terms of trade was most pronounced in the Latin American countries, where the debt problems tended to concentrate (Figure 2).

2.14 The fall in oil prices in the early 1980s completed a price cycle that closely resembles the shorter cycle of other commodities (Figure 1, above). Although the oil price fall has been less pronounced than that of the rest of commodities, several oil-exporting countries have experienced the same difficulties as the non-oil exporting countries because they also expanded their level of expenditures on the assumption that oil prices would never come down and borrowed heavily to finance ambitious social and economic plans. Starting in 1981, oil-exporting developing countries have been experiencing current account

FIGURE 2
TERMS OF TRADE OF NON-OIL
COMMODITY EXPORTERS



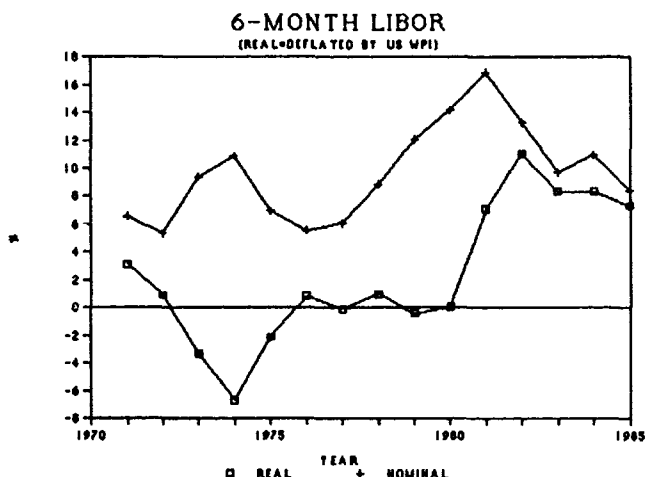
Source: International Finance Statistics (IFS), various issues.

deficits that are increasingly difficult to finance. As a result, the most distressed group of international borrowers includes both oil- and non-oil exporting countries.

International Interest Rate Fluctuations

2.15 International instability was further compounded by fluctuations in both nominal and real interest rates in the late 1970s and early 1980s. The rapidly increasing world inflation of the mid- and late 1970s raised nominal international interest rates while depressing them in real terms (Figure 3), creating a perverse set of incentives that encouraged heavy borrowing. The rising nominal rates increased the need for liquidity, while the negative real interest rates encouraged the use of credit to meet that need. As world inflation declined in the early 1980s, however, real interest rates rose to record levels, substantially increasing the burden of the debt service.

FIGURE 3



Source: International Finance Statistics (IFS), various issues.

B. DOMESTIC POLICIES

2.16 Domestic policies contributing to financial crisis were a combination of long-term, inward-oriented development strategies and short-term macroeconomic policies. These policies resulted in macroeconomic imbalances that were severe enough to cause serious financial problems to average economic agents, including borrowers and financial intermediaries, even those managed prudently. These problems were exacerbated by inadequate banking regulation and supervision, which allowed banks to engage in imprudent financial practices and failed to correct financial problems before they exploded. Such policies set the conditions for the current financial crisis.

Protectionism and the Rate of Growth of Nominal Domestic Demand

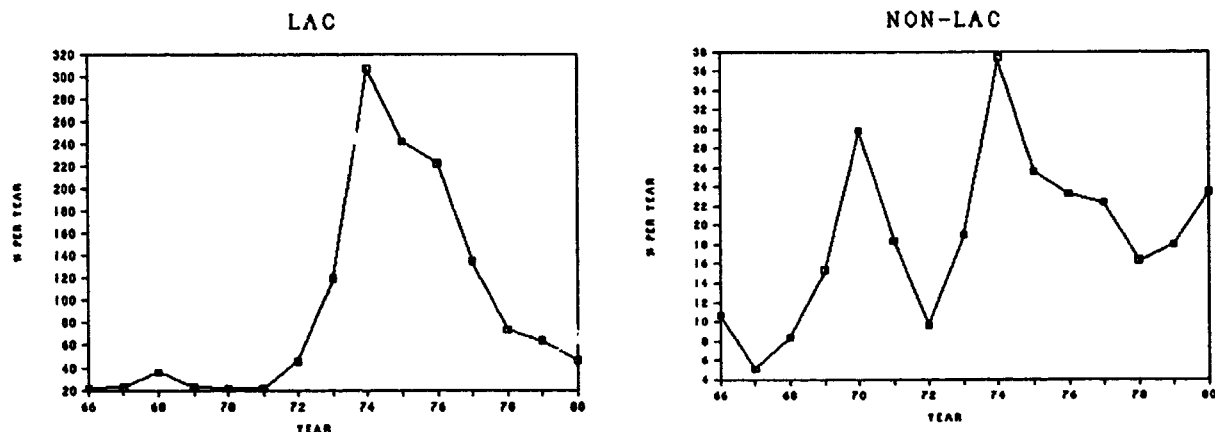
2.17 Countries pursuing inward-oriented development strategies are particularly vulnerable to financial crises. In such countries, the industrial sector developed to service the domestic market under the artificial relative prices created by high levels of protection, and did not generate enough foreign exchange to pay for its imported inputs, which had to be purchased with the proceeds of commodity exports. The distorted relative prices that made the protected activities profitable were sustainable only as long as commodity exports were able to finance the purchase of imported inputs.

2.18 As these countries continued to invest in inward-oriented, import-intensive industries, the surplus from the often neglected commodity exports declined and the countries' ability to expand with their own resources was diminished. Furthermore, their capacity to adjust to negative turns in their terms of trade by reducing imports was impaired because it would have led to decreases not only in consumption but in production as well. Since inward-oriented policies also discouraged exports, in practice they reduced the overall ability of countries to adjust to external shocks.

2.19 Through these effects, inward-oriented strategies created structural pressure to pursue expansionary macroeconomic policies. Given the dependence of economic growth on a growing domestic market, the governments of the now overindebted countries were hard pressed to maintain high rates of growth of nominal domestic demand,⁴ even in times when macroeconomic stability demanded contractionary policies. Also, they were pressed to counteract the contractionary effects of international events, such as the 1973-74 oil price increases. These pressures resulted in the application of highly expansionary policies throughout the 1970s, initially in an attempt to shield their economies against the contractionary effects of the oil crises, and later to take advantage of the commodity boom to attain high rates of economic growth. Such policies not only maintained through the 1970s the rates of growth of nominal domestic demand that had prevailed in the 1960s but increased them significantly (Figure 4).

⁴ The term "nominal domestic demand" is used in this paper to mean the sum of consumption and investment at current prices. It is used interchangeably with nominal absorption and total nominal expenditures.

FIGURE 4
NOMINAL DOMESTIC DEMAND GROWTH IN THE 1970s
SAMPLE OF 17 FINANCIALLY DISTRESSED
COUNTRIES



LAC=Latin American Countries, NON-LAC=Other Countries

Note: The sample comprises the 17 Baker countries. The rate of growth of nominal domestic demand (NDD) was estimated by first expressing NDD for each country and each year as a multiple of the 1965 NDD, which resulted in a uniform index for all countries; next, adding the indices for each year; and finally estimating the rate of growth of the combined index. This procedure gives an equal weight to each country in the final result, regardless of the size of the country and the unit of account used to express its NDD.

Source: International Finance Statistics (IFS), various issues.

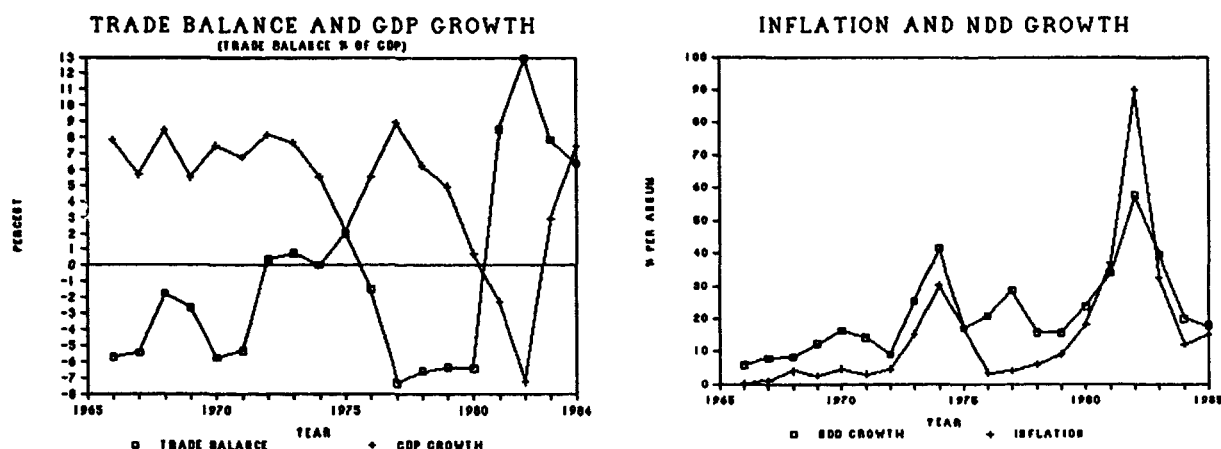
The Trade-off Between External and Internal Balance

2.20 The policy mix chosen by the overindebted countries, namely high rates of expansion of nominal domestic demand and currency overvaluation, created a trade-off between internal and external balance: countries were able to attain one but not both. In the mid- and late 1970s, when the foreign exchange constraint was not binding, the rate of inflation tended to decline because excess demand was turned into large current account deficits. In the early 1980s, when import restrictions were applied, the excess nominal expenditures (which were causing

the external imbalance in the previous years) turned toward domestic suppliers, while real production was falling because of lack of imported inputs. The outlet for excess nominal expenditures was increased inflation.

2.21 Figure 5 shows the case of Costa Rica, where, as a result of the economy's dependence on imported inputs, the rate of growth of GDP has tended to fluctuate in inverse proportion to the ratio of the trade deficit to GDP. The correlation of the rate of inflation with the rate of expansion of nominal domestic demand was lost during 1975-80, when the country was running large current account deficits, but reappeared when external financing for trade deficits topped.

FIGURE 5
TRADE-OFF BETWEEN EXTERNAL AND DOMESTIC BALANCE
IN COSTA RICA



Source: International Finance Statistics (IFS), various issues.

Currency Overvaluation

2.22 Inward-oriented strategies created pressures to overvalue the local currencies as a way to reduce the inflationary impact of excessive rates of growth of domestic demand. Those pressures were added to the ones exerted by external events. Currencies of countries experiencing export booms, which in the mid-1970s included most of the countries now overindebted and especially the oil-exporting ones, tended to appreciate to levels that, although appropriate to achieve external balance during the boom, proved to be overvalued from a

longer-term perspective. This phenomenon, which tends to occur whenever there is a sudden and large inflow of foreign exchange, is quite negative because the currency overvaluation reduces or eliminates the profitability of activities other than the booming ones. The original relative profitabilities are restored when the export boom ends, but by that time several of the enterprises in the non-booming sectors may be bankrupt and excessive resources may have been invested in the booming ones.

2.23 To avoid currency appreciation in these circumstances,⁵ governments could have encouraged both imports and investment abroad by reducing protection and discouraging capital inflows. These measures would have dissipated the inflationary impact of the foreign exchange inflows by maintaining equilibrium in the balance of payments at the original exchange rate, thus reducing the danger of overvaluation.⁶ Most of the now overindebted countries preferred, however, to use the export boom not to reduce protection but to promote the growth of their protected industries. Therefore, they followed policies that appreciated their currencies to levels higher than those warranted by the improved terms of trade. The result was not balanced external accounts but large trade and current account deficits. Figure 6 shows how the capital flows to the 17 Baker countries increased as their currencies appreciated.

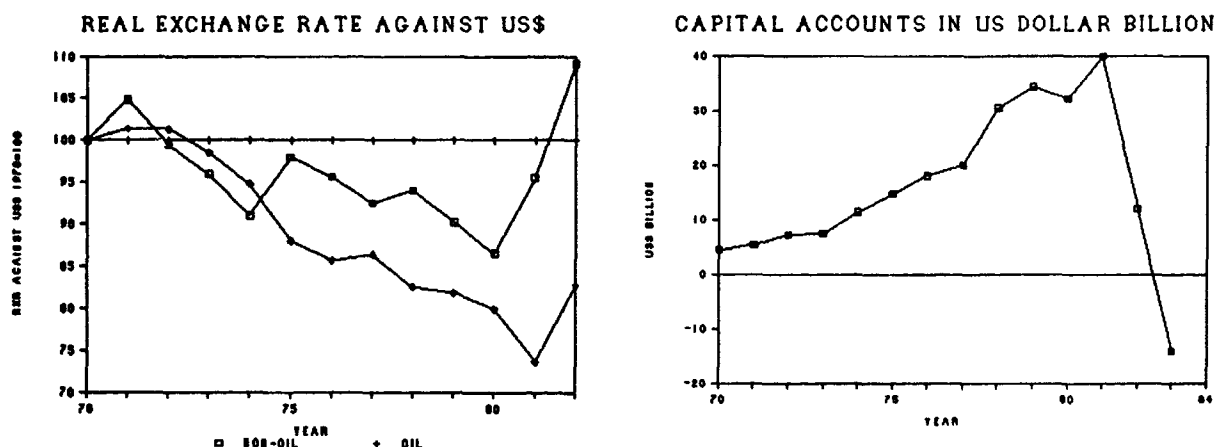
2.24 In some of these countries, the currency tended to appreciate excessively because governments maintained redundant protection;⁷ in others,

5 Even in open, nonprotected economies, monetary action may be required to avoid the acceleration of inflation when there are sudden inflows of foreign exchange. Switzerland, for example, has imposed taxes on deposits from abroad when, as a result of international imbalances, the country has experienced inordinately large capital inflows. In the early 1970s, these taxes rendered the Swiss Franc deposit rates of Swiss banks negative in nominal terms. Another example is Japan, which for decades was able to avoid the appreciation of its currency by encouraging investment abroad.

6 Normal frictions tend to result in lags between the increase in nominal domestic demand and the increase in imports and capital outflows. As a result of these lags, a certain degree of macroeconomic instability was probably unavoidable for commodity-exporting countries as a result of the commodity booms of the 1970s.

7 Tariff protection allows domestic producers to increase their prices up to the sum of the CIF international price plus the tariff. In several cases, this sum is so high that domestic producers sell their products at less than what they could charge on account of the tariff. The excess of the price made possible by the tariff over the actual price charged is called "redundant protection" or "water in the tariffs." Redundant protection allows domestic producers of tradables to increase their prices without fearing competition from abroad even when the currency is appreciating.

FIGURE 6
REAL EXCHANGE RATES
AND CAPITAL ACCOUNTS IN 17
FINANCIALLY DISTRESSED COUNTRIES



Note: The sample comprises the 17 Baker countries. The real exchange rate has been estimated relative to the U.S. Dollar because most of the external debt of developing countries is denominated in that currency.

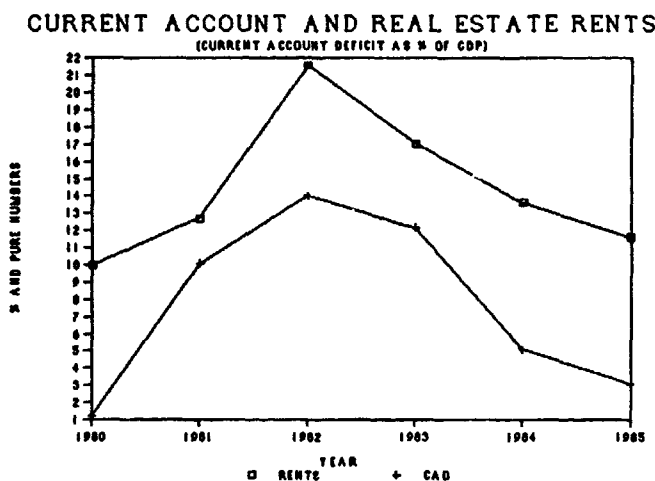
Source: International Finance Statistics (IFS), various issues.

governments took direct action to appreciate the currency by either fixing the nominal exchange rate or reducing the rate of nominal devaluation to levels below the difference between domestic and international inflation. Overvaluation caused severe macroeconomic imbalances and seriously distorted the allocation of resources.

2.25 Domestic Relative Prices: Overvaluation turned domestic relative prices in favor of nontradables. This turn had a great effect in the allocation of both real and financial resources. Export activities became depressed and some of them experienced serious financial problems. In countries with redundant protection to industry, industrial enterprises working for the domestic market initially behaved as nontradables because of the excess protection. The spillover of domestic demand allowed industrialists to increase their prices at the overall inflation rate while the overvalued exchange rate resulted in lower imported input prices. This created an initial boom in import-substituting industry, which attracted resources. However, continued overvaluation eventually eroded

redundant protection, and import-substituting firms joined exporters in recession. As tradable activities became less profitable, resources were taken away from them and put into nontradables, especially real estate. The impact of excessive nominal domestic demand and currency overvaluation on the price of real estate is exemplified in Figure 7, which shows how the real rental price of office space in Malaysia mirrored the evolution of Malaysia's current account deficit.

FIGURE 7
CURRENT ACCOUNT DEFICITS AND REAL RENTAL PRICE OF OFFICE
BUILDINGS IN MALAYSIA



Source: Alan Gelb, "The Speculative Real Assets Cycle in Oil Exporting Countries", 1987, unpublished World Bank paper.

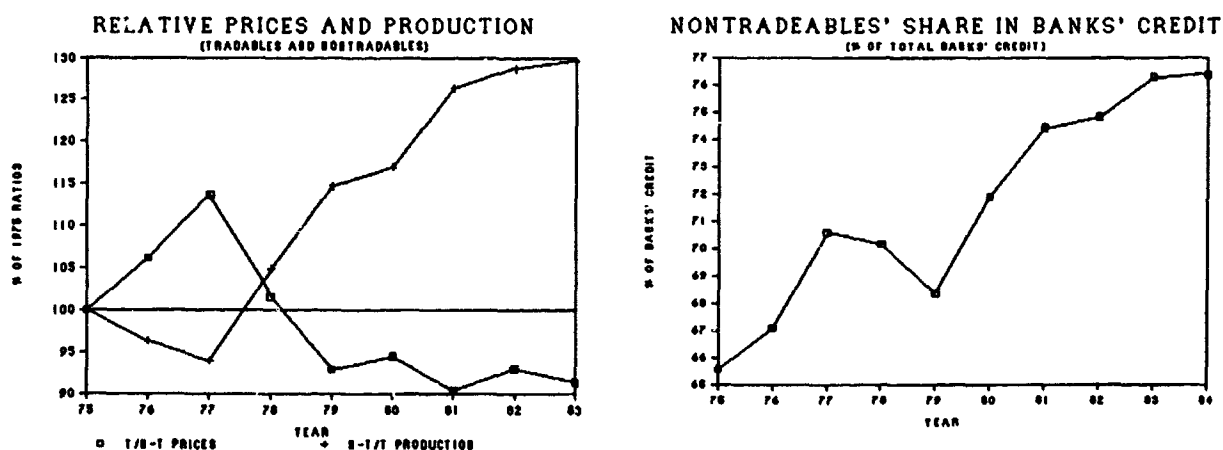
2.26 **The Wealth Effect of Currency Overvaluation:** Overvaluation is likely to have caused a wealth effect and a shift in the country's perceived permanent income that affected the consumption-saving functions of people holding assets denominated in local currency (real estate and financial assets). As the local currency was gaining ground against strong currencies (which in most developing countries are the most common yardstick to measure value), those people felt not only that they were getting richer, but also that they were doing so rapidly. Their felt need to save was therefore reduced, and their propensity to consume grew. Incentives were such that the increased consumption went into imported goods and trips abroad, thus creating the current account deficits that accompanied overvaluation.

2.27 **Speculative Capital Flows:** In Latin America, where capital tends to flow more easily across boundaries than in most other regions, incentives encouraged borrowing in foreign exchange to invest in assets denominated in local currency, a practice that proved to be extremely risky. The incentives arose because, with an appreciating currency, the cost of foreign borrowing was not only low but declining, while the price of assets denominated in local currency was increasing.

The Distorted Allocation of Credit

2.28 As a result of these incentives, credit flowed toward consumption and toward investment in activities that were profitable only as a result of the artificial set of relative prices created by the increasing overvaluation of the currency. These relative prices encouraged real estate speculation and industrial production for a domestic market that was expanding at an unsustainable rate. Thus, macroeconomic incentives created the environment for banks to lend to activities that were not viable in the long run, setting the stage for the financial crisis that followed. Figure 8 illustrates how credit became concentrated on nontradables in Colombia.

FIGURE 8
COLOMBIA.



Source: Revista del Banco de la Republica de Colombia, various issues.

Inadequate Institutional Management and Control of the Financial System

2.29 Prudential control of the banking system, that is, control to ensure the prudent behavior of banks, is necessary because the costs of risk-taking in banking operations eventually burden the taxpayer. Banking regulations and supervision were particularly inadequate in the distressed countries when it came to control imprudent financial practices such as credit concentration and maturity, interest rates and currency mismatches between assets and liabilities; and to regulations concerning provisions for bad debts and write-offs, which were either too permissive or not properly enforced. In addition, supervisory agencies were frequently weak and ill prepared to assess properly the health of financial institutions.

2.30 Although in some cases the banks' imprudent financial practices were the consequence of negligent management, most commonly they were the result of deliberate decisions taken to favor borrowers linked by ownership with financial institutions. Ownership linkages have not caused damage to the integrity of the banking system in some developed countries, notably Germany and Japan, mainly because banking regulations and supervision ensure an independent management. In countries where the independence of banking decisions is not ensured, however, these linkages encourage the concentration of bank credit on related companies and weaken the criteria used to approve loans to these companies, thus increasing the risk of financial institutions. This factor proved very important in precipitating the current financial crises in several countries. For example, in Chile, Colombia, Yugoslavia, Mexico and, among developed countries, in Spain, the financial crisis, although general, particularly affected the portfolios of banks belonging to industrial/financial conglomerates. Also, in several countries, losses have been particularly high in government-owned financial institutions lending to state-owned enterprises. In these cases, as in those involving private conglomerates, credit decisions were taken at less than arms' length.

C. THE UNRAVELING OF CRISES

2.31 The expansionary phase of the financial cycle had itself embodied the factors that would eventually bring about the contractionary phase. After a lag of different duration in different countries, the following events started to occur: (a) the rising costs of nontradable inputs substantially reduced the profitability of industrial enterprises, impairing their ability to service their debts and forcing them to lay off employees; (b) the boom of nontradables ended because the public's acquisitive power declined as a result of the recession of tradables' producers; (c) the larger current account deficits increased the expectations of a major devaluation, leading to increases in real interest rates;

(d) higher devaluation expectations combined with low profitability of local firms and with the end of the nontradables boom to cause capital flight, which tended to contract the money supply and to further increase interest rates; and (e) when the contractionary effect of capital flight could no longer be counterbalanced with foreign borrowing, the central bank's net international reserves started to fall very rapidly, reinforcing devaluation expectations and feeding back the destabilizing forces.

2.32 As a result of these events, and of the negative turn in the terms of trade that made their effects worse, governments were forced to resort to IMF financing, to devalue, and to take measures to contract the rate of growth of nominal domestic demand. People often assume that these actions were the ones that triggered the financial crisis. They forget that countries resorted to those measures because they were already in financial crisis.

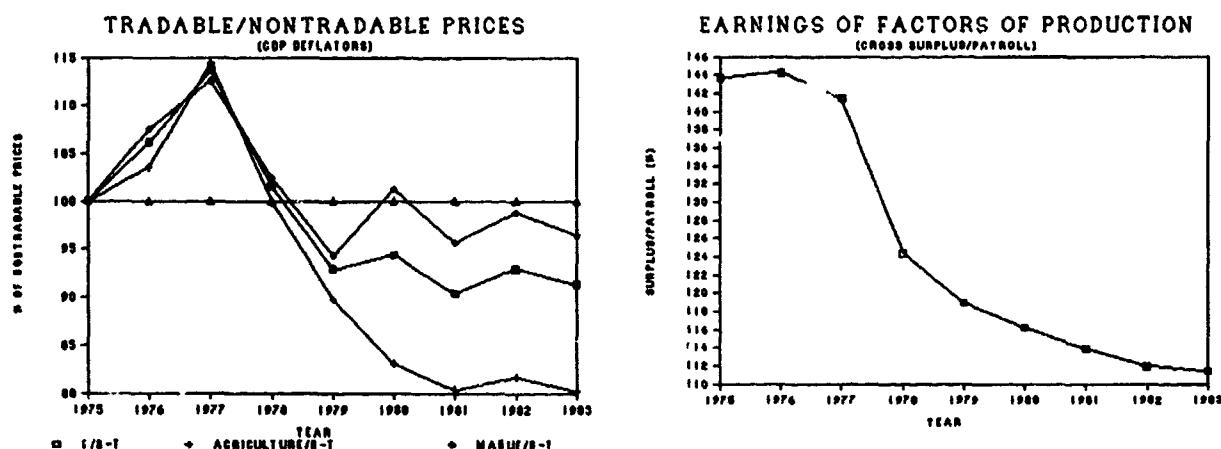
The Falling Profitability of Enterprises

2.33 The predominant role of falling profits in generating financial problems is clearly shown in the case of Colombia, where the portfolio of the banks deteriorated significantly in 1982-83 although, at 34% of GDP, total domestic credit to the private sector was not high by international standards.⁸ Furthermore, the ratio of domestic credit to GDP had increased only three percentage points in 1982-84, when the portfolio problems developed.

2.34 The Colombian debtors' inability to service an almost unchanged level of debt was a result of the currency overvaluation maintained during the preceding years (Figure 9, left), which caused a profits squeeze in the tradables sector. In those years, the cost of nontradable inputs (direct and indirect labor) increased faster than the prices of final products. This effect was stronger in tradable production, but some nontradable sectors (construction, utilities) also suffered from it. As a result of this squeeze, the ratio of gross surplus of enterprises to labor costs (payroll) declined from 1.44 in 1975 to 1.12 in 1984 for the economy as a whole (Figure 9, right). As their profits declined, firms found it more difficult to finance their investments, a good portion of which they were undertaking in order to reduce their growing labor costs. The ratio of gross investment to gross surplus, a measure of the burden imposed by investment needs upon the firms' gross profits, increased from 31% in 1975 to 40% in 1983.

⁸ Colombia followed more conservative macroeconomic policies than the rest of the countries in the sample. As a result, credit did not increase as much as in those other countries and financial distress was much milder.

FIGURE 9
RELATIVE PRICES AND PROFITABILITY OF COLOMBIAN FIRMS
1974-83

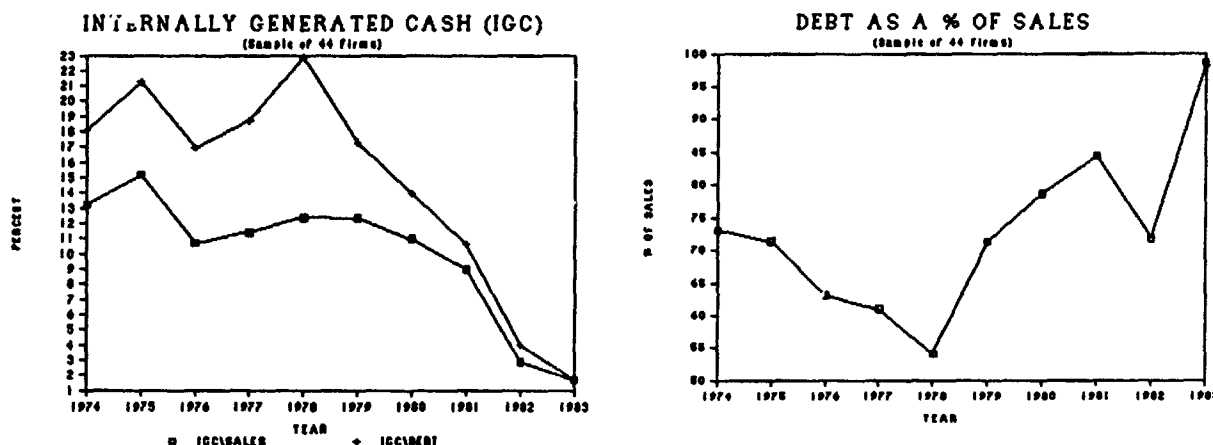


Source: Annual Report of the Bogota Stock Exchange, various issues.

2.35 The profit squeeze that resulted from the currency overvaluation was reflected in the accounts of a sample of 44 firms listed on the Bogota Stock Exchange. The ratio of net profits to sales of the sample declined from 9.4% in 1979 to 0.6% in 1982, and it became negative in 1983. As a result, the sample's ratio of internally generated cash (net profits plus depreciation) to sales declined from 3.8% to 1.7% during the same period (Figure 10, right). The liquidity problems caused by the declining profits led manufacturing firms to increase their borrowings. While the firms' increased indebtedness made their financial situation worse, the negative effect of distorted relative prices upon their profits remained a stronger factor than the volume of debt in causing the sector's financial problems: the sample's ratio of total debt to sales less than doubled in 1979-84 (Figure 10, left), while the ratio of the same debt to internally generated cash multiplied 11 times. The ratio of short-term debt (maturing in less than one year) to sales increased by only 11%, while its ratio to internally generated cash rose 230%.

2.36 Similar reductions in the profitability of enterprises have been observed in other countries for which data exist. In Uruguay, the real rate of return of a sample of 55 industrial companies declined from 7.7% in 1978 to 0.7%

FIGURE 10
INTERNALLY GENERATED CASH AND DEBT AS A PERCENT OF SALES
IN COLOMBIAN FIRMS. 1974-83



Source: Annual Report of the Bogota Stock Exchange, various issues.

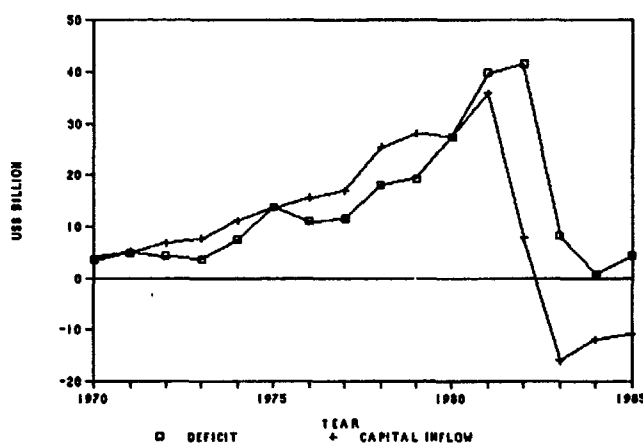
in 1981, at the height of the overvaluation period, while in Chile the reduction in 1980-81 was from 8.5% to -1.5%, and from 8.5% to 6.0% for exportables and nontradables, respectively.⁹

Capital Flight, the Fall in International Reserves, and Devaluation

2.37 Eventually, capital inflows were not enough to cover the current account deficits; hence, banks started to lose international reserves, a signal that prompted speculators to take their capital out of these countries, compounding the loss in international reserves. The difference between the two curves in Figure 11 shows how capital inflows fell short of the current account deficit in Latin America in 1981, declined rapidly after that and became outflows in 1983. The difference between the two curves was financed with losses in international reserves.

⁹ Jaime de Melo, Ricardo Pascale and James Tybout, "Microeconomic Adjustment in Uruguay during 1973-81: The interplay of Real and Financial Shocks"; and Julio Galvez and James Tybout "Microeconomic Adjustments in Chile during 1977-81: The Importance of Being a Grupo". Both in *World Development*, Volume 13 Number 8.

FIGURE 11
CAPITAL FLOWS AND CURRENT ACCOUNT
DEFICITS IN LATIN AMERICA
(EXCLUDES EXCEPTIONAL FINANCING)



Note: The difference between the curves shows the excess or deficit of capital inflows to cover the current account deficits and, therefore, it is a measure of capital flows that were not caused by, or reflected in, current account deficits in the year when they took place. In 1975-79, capital inflows exceeded the current account deficits, leading to a buildup of reserves. In 1981-85, reserves fell because capital inflows were not enough to finance the current account. Since 1983, capital flows have been negative.

Source: International Financial Statistics (IFS)

2.38 The fall in net international reserves tended to cause a contraction in the stock of money. Initially, some countries tried to shield their economies from this contraction by increasing the rate of monetary creation while borrowing abroad to cover the decline in reserves. However, expanded monetary creation further increased the pressure on the trade account and encouraged capital flight, worsening the problem after a short while. Eventually, international lenders became concerned and stopped lending to these countries. Without external credit, reserves fell faster and liquidity problems escalated.

2.39 The liquidity crisis brought about sharp rises in real interest rates, which also tended to increase as a result of devaluation expectations ¹⁰ and the simultaneous increase in international interest rates. The effect of rising interest rates on the banks' portfolios was threefold: (a) it reduced the current profits of debtors; (b) it reduced the present value of expected profits, thus further depressing the value of existing capital assets; and (c) it exerted pressures on the liquidity of enterprises. Collection problems escalated, as the income generated by the assets pledged as collateral fell below the cash flow needed to service their associated debts. Foreclosures did not solve the problem because the price of collateral also collapsed. The financial crisis had started.

2.40 Eventually, the fall in international reserves forced major devaluations. While devaluations corrected the distortion in relative prices that led to the crisis, setting the stage for the recovery of the tradable sectors and the resumption of stable economic growth, their impact on the financial system was so devastating that most of the indebted economies remained severely depressed. Their capacity to increase exports rapidly was severely diminished because: (a) exporting companies were in bad shape as a result of the previous overvaluation; (b) most of the investment of the overvaluation period had been allocated to nontradable activities; (c) the burden of the servicing the external debt in local currency increased substantially, reducing the availability of savings for investment; (d) devaluations coincided with a worldwide recession and (e) the domestic financial distress that accompanied these events generated economic forces that led to a perverse allocation of resources and to macroeconomic instability.

III. THE ECONOMIC EFFECTS OF FINANCIAL CRISES

A. THE SYMPTOMS

Stagflation

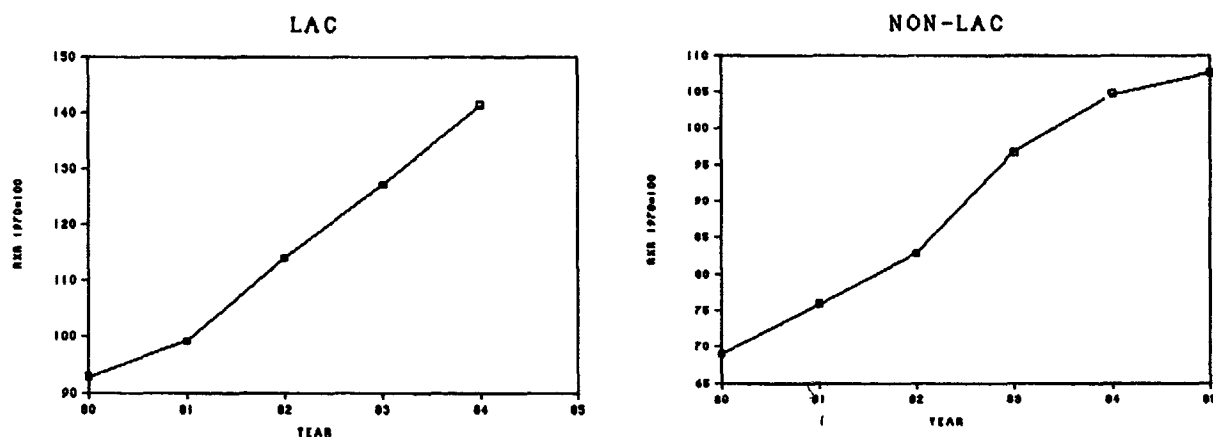
3.1 In the early 1980s, overindebted countries were forced to implement stabilization programs because they could not to finance the large current account deficits from the previous years. The results of these programs have not been encouraging. While the current account deficits have been reduced, inflation has accelerated in several countries and the rate of growth of real production has declined substantially or has become negative. Some of these countries,

¹⁰ This effect was highly visible in countries with liberal interest rate policies. In countries repressing interest rates, it was less visible but still present, shown in higher rates in unofficial markets and large capital flight.

like Brazil and Argentina, have shown an erratic economic behavior, with periods of high inflation followed first by price stability and later by renewed inflation. Some countries, like Yugoslavia, are confronting a steady destabilization, while others remain immersed in a deep stagflation.

3.2 The overindebted countries' limited success in achieving stability can be attributed to the policies they have followed. For these countries, the objectives of economic stabilization should have been to reduce inflation and the current account deficit while minimizing the impact of these measures on growth. To do this, domestic production of tradables had to become more competitive so that the decline in demand did not translate into reduced production. Most of the countries assumed that real devaluation would be sufficient to attain external balance, regardless of what was happening to nominal domestic demand, and that it would be effective regardless of what was happening to the domestic relative prices of tradables and nontradables. Hence, the most common stabilization package among financially distressed countries included substantial real devaluations (Figure 12) but no reduction in the rate of growth of nominal domestic demand (Figure 13).

FIGURE 12
REAL EXCHANGE RATE AGAINST THE US DOLLAR, 1980-85
SAMPLE OF 17 FINANCIALLY DISTRESSED COUNTRIES.

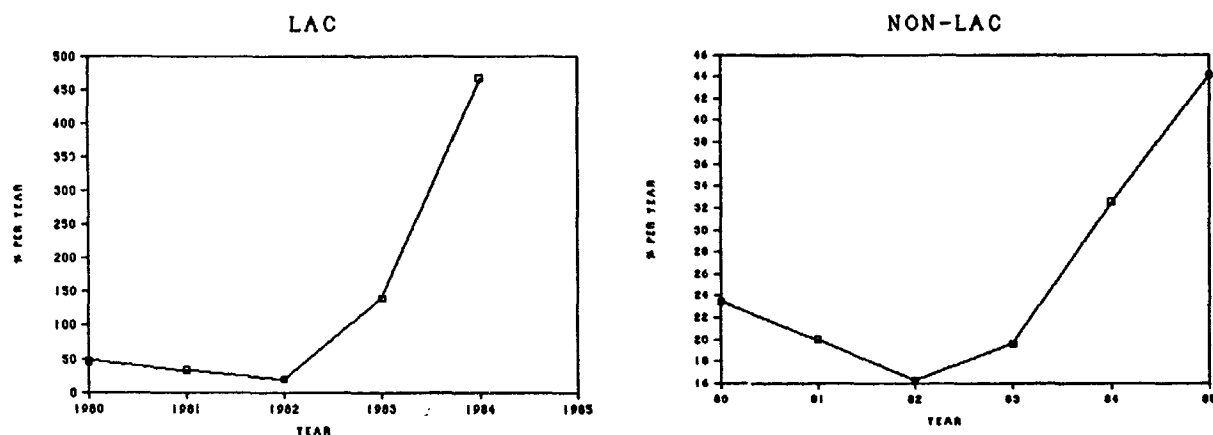


Note: LAC=Latin American Countries, NON-LAC=Other Countries. The sample comprises the 17 Baker countries.

Source: International Financial Statistics (IFS), various issues.

3.3 This combination of policies helped with the external deficit but exacerbated the domestic rate of inflation. Given the external constraint, excess nominal domestic demand caused an acceleration of inflation, and several countries showed signs of a vicious circle of devaluation and inflation: the more they devalued, the higher the inflation rate and the more they needed to devalue. On the supply side, the shortage of imported materials and spare parts depressed domestic production, leading to unemployment and economic hardship. For many countries, the result has been the already mentioned alternation of recession and expansion, depending on the availability of external financing; for others, it has meant continuing stagflation.

FIGURE 13
NOMINAL DOMESTIC DEMAND GROWTH IN THE 1980S
SAMPLE OF 17 FINANCIALLY DISTRESSED COUNTRIES



Note: The sample comprises the 17 Baker countries.

Source: International Financial Statistics (IFS), various issues.

Lack of Supply Response to Devaluations

3.4 The idea that devaluation alone was sufficient to attain external balance is based on the belief that external and internal imbalances are different problems and, therefore, need to be treated with different instruments. They are, in fact, different manifestations of the same phenomenon: an excess of acquisitive power over domestic supply at the current price level.¹¹ Therefore, the appropriate instrument to attain both internal and external adjustment is a reduction of the rate of growth of nominal domestic demand.¹² Devaluations

¹¹ Nominal domestic demand can be too great to obtain domestic price stability or equilibrium in the balance of payments even when real production is falling or stagnant. This is the case when domestic expenditures are expanded in the presence of a binding external constraint.

¹² The fact that the sharp devaluations of the past few years have coincided with equally sharp reductions of trade deficits in the overindebted countries has reinforced the idea that devaluations are sufficient to attain external balance. However, this interpretation ignores the fact that, in the case of these countries, trade deficits would have disappeared even if they had overvalued their currencies, simply because nobody would have financed these deficits.

alone do not produce lasting changes in the trade balance when there is excess nominal domestic demand because their effects are reversed by domestic inflation. A reduction in the rate of growth of nominal domestic demand, on the other hand, will both improve the balance of payments and stabilize the price level since it reduces the acquisitive power of the population.

3.5 The goal of devaluation is to minimize the impact of reduced domestic demand on production by inducing an increase in demand for exports and a substitution of domestic for imported products. The attainment of this goal requires a shift in the allocation of resources from nontradable to tradable activities and an opposite shift in the composition of domestic demand. Real devaluations facilitate this shift by causing an increase in the absolute price of tradables. If there is no devaluation, the required change in relative prices can take place only through a fall in the nominal prices of nontradables, a process that can take a very long time. Meanwhile, unemployment is likely to rise and economic activity remains depressed. Thus, devaluation is mainly an instrument for economic recovery, not for stabilization.¹³

3.6 For a real devaluation to be successful, the domestic prices of tradables must increase relative to those of nontradables. But this does not always occur. Quite commonly, there is an explicit or implicit indexation of wages, which defeats the government's efforts to shift relative prices through devaluations because the real wage, the basic nontradable price, does not fall as much as is needed to make production of tradables competitive. As a result, real devaluations reduce the purchasing power of the local currency in terms of foreign exchange but do not encourage the production of tradables.

3.7 There are other rigidities, such as price controls, direct allocation of resources, and equivalent administrative regulations, that limit resource flows to the activities that could bring about economic recovery. Financial crisis introduces rigidities that preclude the flow of resources not only from nontradables to tradables but, more generally, from inefficient to efficient activities. This perverse allocation is made possible by the changes that financial distress introduces in the normal behavior of economic agents.

3.8 Faced with immediate bankruptcy, both bankers and their debtors give priority to their survival over other, longer-term objectives, including profitability. Debtors borrow at interest rates higher than the long-term profitability of their real assets, even if they have no clear idea of how they are

¹³ Devaluations have a contractionary effect that is additional to that of restrictive fiscal and monetary policies because they reduce the acquisitive power of a given nominal income. This effect, however, is nullified if nominal income increases proportionally.

going to repay their debts. Bankers refinance bad debtors because failing to do so would force them to increase their write-offs. Furthermore, bankers lend almost exclusively to bad debtors because, to remain liquid, they raise deposit interest rates to levels that the more solvent borrowers are not willing to pay.¹⁴

3.9 The transfer of resources to loss-making firms has devastating effects on the allocation of resources. Loss-making firms are maintained in operation, wasting resources that could be employed in increasing production of exportable goods or saved to reduce the rate of growth of domestic demand and macroeconomic instability. Furthermore, firms unable to sell their goods produce for inventories that will be hard to sell.

B. THE ROOTS OF MACROECONOMIC INSTABILITY

3.10 In addition to blocking the flow of resources toward competitive activities, financial crisis also contributes to macroeconomic instability. Governments are quite reluctant to allow the demise of the banking system, and tend to take actions to maintain afloat both the banks and their inefficient debtors. These actions include raising protection, granting preferential allocation of foreign exchange to distressed borrowers, and maintaining high rates of monetary creation to sustain the liquidity of banks.

3.11 Financial crisis leads to macroeconomic instability by generating forces that: (a) lead to high rates of monetary expansion; (b) create wealth effects that tend to maintain high rates of expansion of nominal domestic demand; (c) increase the income velocity of financial assets; and (d) reduce the effectiveness of increased interest rates in depressing credit demand. Although these effects may take place in countries without large external debts, generally there is a direct link between a country's foreign exchange cash flow and the inflationary effects of financial distress.

The External Transfer Problem

3.12 As a result of the interruption of voluntary lending from abroad and the increased service of their external debt, most overindebted countries are experiencing negative net foreign exchange cash flows.¹⁵ To avoid inflation,

14 For a vivid description of the kind of behavior that financial distress induces in bankers see: Aristobulo de Juan, "How Good Bankers Become Bad Bankers," informal INDFD paper, 1986.

15 The net cash flows in foreign exchange, or net transfers, are defined as net capital flows less interest payments abroad. They become negative when disbursements from abroad no longer cover the service of the external debt.

such net outflows should result in equivalent net reductions in the reserve money in circulation, which would take place as economic agents sell local currency to the central bank in exchange for foreign exchange. The contraction in reserve money supply is needed to maintain price stability because, as a result of the net transfer abroad, an equivalent contraction takes place in the domestic availability of real goods and services. This was what happened when countries were under the gold standard. Foreign exchange outflows caused a decline in reserves, which led to a contraction in the stock of reserve money.

3.13 Therefore, in countries with large negative net transfers, even monetary creation aimed at just keeping constant the stock of reserve money in nominal terms results in high rates of inflation. The figures in Table 1 show the changes in the stock of reserve money that would have occurred had Yugoslavia been on a gold standard. The decline in the stock of reserve money did not take place, however, because the central bank created new reserve money through expanding its net domestic assets, which brought about accelerated inflation. For example, in 1984, to keep the stock of reserve money constant, the central bank of Yugoslavia had to create reserve money equivalent to 64% of the previous year's stock. This would have been highly inflationary. In practice, it created 70%.

3.14 The transfer problem is intimately linked with the domestic financial problems. Central banks intervene to create reserve money because the contraction that would take place as a result of the foreign exchange cash outflows would induce the bankruptcy of banks.

TABLE 1
MONETARY PRESSURE CAUSED BY THE NET
TRANSFERS PROBLEM IN YUGOSLAVIA
(% OF PREVIOUS YEAR'S DINAR RESERVE MONEY)

	1980	1981	1982	1983	1984
NET TRANSFERS ABROAD	11.8	-2.7	-20.0	-12.5	-51.1
CHANGES IN F/C DEPOSITS	17.6	19.0	-0.2	5.5	-13.3
TOTAL F/C CASH FLOW	29.4	16.3	-20.2	-7.1	-64.4
MEMO:					
ACTUAL RATE OF DINAR RESERVE MONEY CREATION (FLOW)	NA	31.8	50.5	55.1	70.4
INFLATION RATE (CPI)	29.9	39.7	32.9	39.1	55.4

Note: The foreign currency cash flows were converted into dinars at the average exchange rate and divided by the previous year's stock of reserve money. The result is the change in the stock of reserve money that would have happened in the absence of central bank intervention. In 1980-82, the foreign exchange cash flow was positive and led to increases in reserve money; the opposite happened afterward.

In Yugoslavia, flows of foreign exchange include both transactions with agents abroad and changes in foreign currency deposits. These estimates are only suggestive of the order of magnitude of flows because of lack of data on the actual flows by currency. For example, an unknown portion of the decline in the US Dollar value of deposits in 1984 was caused by the appreciation of the US Dollar relative to the DM (a substantial portion of the foreign currency deposits are denominated in DMs). Yugoslav authorities have confirmed that a decline in deposits took place in that year.

SOURCE: World Debt Tables for net transfers, National Bank of Yugoslavia for foreign currency deposits and IMF for reserve money

Monetary Expansion

3.15 Governments trying to keep loss-making banks afloat confront a difficult dilemma. On the one hand, they want to stabilize the economy, which requires a reduction in the fiscal deficit. On the other hand, they need to make substantial transfers to maintain the liquidity of the banking system.

Several countries have tried to resolve this dilemma by granting the needed transfers not through the budget but through the central bank, which transfers resources by incurring losses in its operations with the banking system. One of the most common mechanisms through which these transfers are granted is the absorption by the central bank of the foreign exchange valuation losses incurred by financial institutions (or their customers) through preferential exchange rates.¹⁶ Also, central banks frequently absorb the banks' portfolio losses through subsidized rediscounts and, in some cases, through the purchase of the bad portfolio without discount.

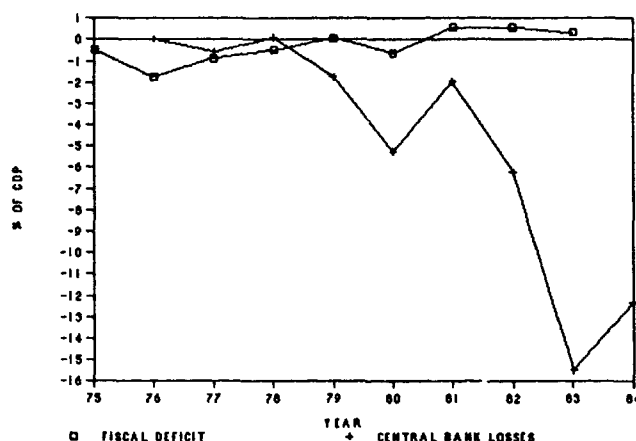
3.16 By transferring the burden of these losses to central banks, however, governments do not eliminate the economic consequences of overspending. The transfers only render inadequate the conventional definition of fiscal deficit. If this definition is expanded to include the financial public sector, the meaninglessness of the transfer of losses is exposed. This is obvious in the case of governments transferring to central banks the foreign exchange valuation losses of public enterprises, which should be covered from the budget. It is equally true when the government decides to subsidize other borrowers or financial intermediaries.

3.17 The magnitude of losses that central bank's can sustain is illustrated in Figure 14. In Yugoslavia, inflation has been increasing throughout the 1980s, and is now 170%, although the conventionally defined fiscal deficit was reduced to zero in 1981. However, the central bank's annual losses were well over 13% of GDP in 1984. In Costa Rica, where the conventionally defined fiscal deficit is about 1.3%, the central bank annual losses are on the order of 7% of GDP, and the ratio of the stock of losses to GDP exceeds 50%. As a result, the current account deficit is about 9% of GNP.

3.18 The expansionary effects of the central bank's losses on the money supply are not obvious because they occur by omission. In the case of foreign exchange valuation losses, the monetary contraction that should take place when debtors purchase foreign currency to service their debts does not happen in full because debtors pay to the central bank an amount in local currency that is less than what would be required at the current exchange rate. The same is true with the portfolio losses of banks: the monetary contraction that should take place when the holders of the banks' liabilities absorb these losses does not happen because the central bank is subsidizing the banks.

¹⁶ Quite commonly, the central bank also absorbs the valuation losses incurred by the government on its external debt.

FIGURE 14
YUGOSLAVIA: FISCAL DEFICIT AND
CENTRAL BANK'S LOSSES



Note: The fiscal deficit only covers the central government. The central bank's losses are approximated by its "other net domestic assets," which comprise mostly those losses.

Source: International Financial Statistics (IFS), various issues.

3.19 The monetary effects of the central bank's losses are further obscured by the fact that not all of them result in an immediate cash creation. When exchange rates are subsidized, losses are accrued to the central bank whenever the currency is devalued. Although portfolio losses are not accrued in the books of the central bank, they are accrued in the accounts of the other banks, which will in due time be rescued by the central bank. Cash losses, in contrast, occur only when the central bank makes payments abroad on behalf of domestic borrowers, or when it transfers subsidies to weak banks. Only the cash losses have an immediate monetary effect. Nevertheless, accrued but unrealized losses also have a direct expansionary effect on nominal domestic demand.

The Wealth Effect of Unrealized Losses

3.20 The operation of banks that are insolvent generates a wealth effect that keeps nominal domestic demand at levels higher than those that would prevail if the losses were absorbed by the holders of the banks' liabilities. As long

as liabilities exceed assets in the banking system, depositors count as part of their wealth some financial assets that in effect do not exist. Therefore, their propensity to spend is not diminished, as it would be if they had to rebuild their lost financial assets.¹⁷ The sign of the wealth effect is unambiguously similar to that of a monetary expansion. In the absence of central bank intervention, those losses would be immediately realized through the bankruptcy of distressed banks, which would contract the stock of monetary and financial assets. A similar wealth effect takes place when central banks absorb devaluation losses that are accrued but not realized in cash. In the absence of central bank intervention, debtors in foreign exchange would contract their expenditures when realizing that their indebtedness has increased, even if their payments are not still due, because they would know that they had to generate more cash service their debts.

3.21 The wealth effect plays a role similar to those of wage indexation and inflationary expectations: it increases the resistance of the economy to the changes needed for both stabilization and improved allocation of resources. In the case of losses officially accrued to the central bank, the monetary authorities have no other choice but to eventually incur the cash losses. In all cases, monetary creation undertaken to cover losses that had already been implicitly or explicitly accrued validates a behavior that was elicited by the lack of adjustment at the time of the accrual.

The Effects on Spreads and Velocity

3.22 In several countries, central banks are financing part or all of their transfer of resources to financially distressed economic agents by manipulating interest rates and spreads between lending and deposit rates. A common mechanism is the imposition of negative real deposit interest rates. The proceeds of the tax thus collected are used to help in the repayment of external obligations of illiquid or insolvent debtors, to keep insolvent companies in operation and, in multiple-currency countries, to maintain the value of foreign currency deposits.

17 A recognized financial loss has two effects on economic behavior: (a) an income effect, which leads agents to save in order to rebuild the desired total value of their portfolios; and (b) a substitution effect, that concentrates the marginal saving on financial instruments, the share of which in the total portfolio has been reduced from the originally desired level. The substitution effect can work in reverse, however, when the financial loss is accompanied by a loss of confidence in the banking system, which is what governments try to avoid.

3.23 Central banks can increase the spread directly, by controlling interest rates, or indirectly, by forcing banks to surrender resources to the central bank at zero or low nominal interest rates. In the first case, the income of banks is boosted artificially by fixing a large difference between deposit and lending interest rates, thus helping them to recover their losses. For example, in Yugoslavia the spread between the controlled deposit and lending rates increased from 5% in 1981 to 27% in 1984; banks kept the proceeds. In the second case, governments force banks to invest a portion of their assets in low-yielding financial instruments, the proceeds of which are used to subsidize the banks themselves (through nonperforming portfolio purchases, for example) or their debtors (through subsidized refinancing). Although the tax is levied on banks, the payers are depositors and the beneficiaries are the banks, which pass on to the government resources of others and receive them back as increases in their net worth. Even in countries where there is no control on interest rates nor increases in reserve requirements or forced investments, banks tend to exert their market power to increase the spreads and improve their profitability.

3.24 Countries controlling interest rates to alleviate financial crises (Argentina, Bolivia, Yugoslavia, Mexico) have experienced a declining demand for monetary and financial assets and capital flight. Reductions in the demand for money compound the problems created by excessive monetary creation because they increase the population's propensity to spend out of a given stock of money. When the velocity of money is increasing, nominal domestic demand will rise even if the stock of money is not increased. In Argentina and Bolivia, the decline in demand for monetary and financial assets has been crucial in causing the rate of growth of nominal expenditures to accelerate. Although this phenomenon has not been widespread, the role of rising velocity will become more important in other distressed countries if real interest rates are not raised. This would make it more difficult for the government to control inflation through credit restraint.

Interest Rates and Credit Demand

3.25 Financial crisis also reduces the effectiveness of interest rate policies in reducing credit demand and, through it, the rate of growth of expenditures. Borrowers in distress do not care about the rate of interest they have to pay. As a result, the usual relationship between interest rates and credit demand is reversed: higher interest rates lead to greater credit demand because they increase the amounts that distressed debtors have to borrow to service their previously contracted debts.

A Special Case: Multiple-Currency Countries

3.26 In some countries, the banking system is allowed to receive deposits and lend in foreign currency. In such countries, devaluations cause an immediate increase in the local currency value of accounts denominated in foreign exchange, increasing the purchasing power in local currency terms of the holders of foreign exchange deposits. In normal circumstances, this effect would be compensated by a commensurate decline in the propensity to spend of debtors in foreign exchange. However, if the borrowers' ability to spend is not reduced either because they are not repaying their obligations or because the central bank is assuming the foreign exchange risk in their debts, the effect of the devaluation is not symmetrical. In these cases, the effect of devaluation in reducing the population's propensity to spend is less than expected.

3.27 Monetary creation attributable to the effects of devaluation on the local acquisitive power of deposits denominated in foreign currency can be very important in some countries. In Yugoslavia, for example, commercial banks onlend about 20% of these deposits and deposit the remainder with the central bank, which suffers losses in local currency terms with devaluations because it does not keep assets denominated in foreign currency to match its liabilities with the banks. Thus, when the currency is devalued, only about 20% of the increase in the dinar value of the banking system's local liabilities in foreign exchange is matched with equivalent increases in the dinar value of credits denominated in foreign exchange. The remaining 80% is matched by the central bank's capital losses in dinar terms. As a result, almost three quarters of the 1981-84 increase in reserve money was attributable to increases in the dinar value of the central bank's foreign currency liabilities to the local commercial banks.

C. THE CONSEQUENCES OF IGNORING THE LOSSES

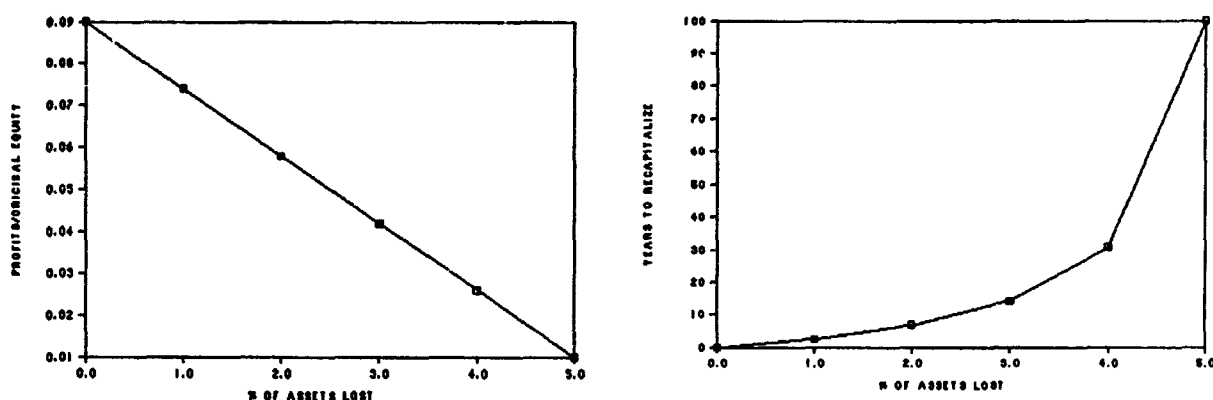
3.28 Absorbing losses is such a painful process that the natural tendency of governments confronting a serious financial crisis is, first, to do nothing, hoping that the problem will disappear with time, and second, to find a solution that leads to economic recovery without having to absorb the losses. None of these actions are likely to solve the problem, as the experience of several countries that have tried them shows.

Deepening of Financial Distress

3.29 Doing nothing does not solve the problems of financial crisis. Rather, the symptoms described in the preceding section tend to aggravate with time. The longer the delay in allocating the losses and recapitalizing the banks, the larger the losses will be because financial distress is a progressive phenomenon.

When banks have losses, a double effect is produced: their net worth is reduced and their ability to regenerate their original net worth through profits diminishes because there are less performing assets to cover the expenditures of an unchanged or increasing amount of liabilities. Figure 15 shows the deterioration of the profitability of a hypothetical bank with an original leverage of 20 to 1 and with losses ranging up to 5% of its assets (100% of its original capital). The figure also shows the period needed to recapitalize it out of normal profits, which reaches 100 years after the original capital is lost. When losses amount to 6% of the assets (120% of the original capital), the bank makes losses and it cannot recover without an influx of fresh capital.

FIGURE 15
EFFECT OF LOSSES ON THE PROFITABILITY OF A
HYPOTHETICAL BANK
AND TIME NEEDED FOR ITS RECAPITALIZATION



Note: The bank of the example has a 20 to 1 leverage, its interest rates are 5% and 8% for deposits and loans respectively, its administrative costs amount to 3% of the original assets, and it has an original yield on capital of 9%. The results of these calculations are highly sensitive to variations in the spread and operation costs but are always progressive.

Inflation

3.30 Some governments have tried to eliminate financial crises either by causing a once-and-for-all increase in the price level or by setting ceilings

on interest rates while inflating the economy. In theory, since the instantaneous adjustment in the price level would take the economy by surprise, imposing ceilings on interest rates should not be necessary. After the adjustment has taken place, interest rates can be freely set by market forces because the losses have already been absorbed by the holders of nonindexed financial assets. In practice, however, a sudden increase in the price level will tend to create inflationary pressures so strong that governments may force central banks to validate them. This option can therefore be treated as functionally equivalent to increasing the rate of inflation.

3.31 Inflation is sometimes advocated as a solution to financial crisis for two main reasons: (a) no write-offs are needed to eliminate the stock of losses of the banking system because price increases reduce the real value of financial assets and of liabilities simultaneously; and (b) most of the burden of the adjustment falls upon depositors, which superficially seems equitable because they are part of the sector that profited from the high real rates of interest that normally precede and accompany a financial crisis. These schemes are not equitable, however, because the current distribution of deposits does not necessarily coincide with the past distribution and, more important, because such schemes bail out the banks' shareholders, who benefited the most from the operation of the banks. Also, an inflation tax distributes the burden of the subsidy in an uneven and unpredictable manner and requires the closing of the financial market for a prolonged period to avoid capital flight.

3.32 More fundamentally, inflationary schemes are not a solution to financial crisis because they do not address the primary cause of financial distress: the continued allocation of resources to loss-making activities. On the contrary, inflation shifts relative prices in erratic ways that set the stage for another financial crisis in the near future. Furthermore, since the elimination of the banking system's stock of losses is achieved by deflating the real value of the system's existing assets and liabilities, it results in new losses; the income generated by the smaller scale of operation is not enough to cover the fixed costs. Increasing the size of the banking system in real terms becomes difficult because of the high inflation rates. Such a step would not make sense, anyway, if credit expansion would go to inefficient activities.

3.33 The only country that has tried the inflationary solution in an explicit way, Argentina in the early 1980s, continued to suffer a financial crisis after the real value of the then existing stock of debts was wiped out by a sudden acceleration of inflation. Since the early 1980s, 179 financial institutions have failed while 19 have come under the management of the central bank. The remaining institutions are experiencing serious profitability problems.

The country was demonetized, real interest rates rose over 50% in real terms, and the average maturity of deposits dropped to less than seven days. After applying this solution, Argentina was left with at least the same degree of financial distress as before, plus all the problems of an extremely high rate of inflation. The government then tried another solution, monetary reform.

Monetary Reform

3.34 Several governments have tried to curb inflation by reducing the deficit of the nonfinancial public sector by transferring expenditures from the budget to the central bank. However, inflation has remained high even when the deficit of the nonfinancial public sector fell. Failing to recognize the inflationary effects of central bank losses, some governments have identified inflationary expectations as the main source of price increases. Following this idea, Brazil, Argentina and Bolivia have attempted to eliminate their macroeconomic imbalances through stabilization packages based on introducing a new currency to break inflationary expectations.

3.35 Inflationary expectations, however, do not cause inflation. Inflation is essentially a monetary phenomenon, the change in the price of money relative to the price of other commodities. As with any other commodity, the price of money depends on supply and demand. Inflationary expectations are important but for a different reason: they increase the cost of stabilization in terms of unemployment and lost production. If companies keep on raising their prices and workers keep on enjoying wage increases when the rate of growth of the supply of money is restricted to levels that do not validate the current rate of inflation, production and employment will drop because of lack of effective demand. Thus, the effects of inflationary expectations are equivalent to those previously described for wage indexation: they are an obstacle to shifts in relative prices.

3.36 Monetary reforms are also carried out to reverse a declining trend in demand for money, which, in certain countries, may be an important source of inflation (para. 3.22). Declines in demand for money, however, are the result of declining yields of monetary assets, which, in turn, arise from interest rate controls or, in countries bordering on hyperinflation, from a general loss of confidence in the local currency. The actions needed to solve this problem are to reduce the inflation rate--to foster demand for non-interest-bearing money--and to liberalize the interest rate. Although these two effects can be achieved without monetary reform, the introduction of a new currency can shorten the time it takes for the public to believe that the yield of monetary assets will increase.

3.37 Therefore, although inflationary expectations do not cause inflation, monetary reform can be a powerful instrument to accelerate stabilization. It is, however, an instrument that can be used but once in a generation because its impact is only psychological. If it is not accompanied by measures that reduce inflationary pressures, it soon loses its effectiveness. In fact, monetary reform is only useful when the psychological aspect is the only unresolved issue in an otherwise complete stabilization package.

3.38 The package introduced in Brazil, the Plan Cruzado, did not meet these requirements. Instead of moving to reduce the rate of growth of nominal domestic demand, the government resorted to a highly expansionary macroeconomic policy, repressing its inflationary impact with price controls and a fixed nominal exchange rate. With nominal domestic demand growing very rapidly, production turned away from export markets to meet the local boom, diminishing domestic inflationary pressures but also dramatically reducing the large trade surplus that Brazil had enjoyed since the early 1980s. The removal of wage indexation, a part of the package, backfired because wages increased at rates higher than inflation. The pressure of domestic demand eventually led to a serious overvaluation of the currency, manifested through purchasing power parity changes and, where price controls were in force, through widespread scarcities. As the currency became more overvalued, real interest rates rose to extremely high levels. After about one year, the government was forced to devalue the currency and inflation returned with a vengeance.

3.39 In Argentina, the government introduced the Austral Plan, with features similar to those of the Cruzado Plan. The nonfinancial fiscal deficit was relatively low, about 1.6% of GDP, but the central bank was posting annual losses at the rate of 2.5% of GDP as a result of the difference between the interest rates it paid on forced investments and the rates it charged on its rediscounts, most of which were given to weak banks. Furthermore, since the recipients of these rediscounts were not servicing, and are not likely ever to service, their debts with the central bank, the whole of the rediscounts (principal plus interest) was equivalent to a fiscal transfer.¹⁸ If this effect is taken into account,

¹⁸ Banks owned by provincial governments and banks in liquidation are among the heaviest recipients of rediscounts. Before April 1986, provincial banks were financing their losses with deposit increases, which they got by paying interest rates above the average. In April 1986, believing that these banks were the cause of the high real interest rates prevailing in the country, the government banned them from the free-interest-rate deposit market. The banks became illiquid and, at the end of 1986, the central bank waived their obligation to constitute reserve requirements. Their illiquidity, however, kept on increasing, and the central bank has been providing them with resources through increasing rediscounts.

the overall fiscal deficit easily reached 7% of GDP. With such a deficit, inflationary pressures became quite strong, real interest rates rose to levels on the order of 50%, the average maturity of deposits became slightly longer than a week and the black market exchange rate increased substantially over the official one. Time rapidly eroded the psychological impact of monetary reform and reality took over. The government introduced several mini-Austral Plans within the Austral Plan, and, when these also collapsed amidst inflation rates increasing to 30% per month, the recent Primavera Plan. Since the Primavera Plan does not address the fundamental problem, that of excessive rates of growth of nominal domestic demand, the possibilities of success for such Plan are practically nill. At the core of the problem is the monetary creation carried out to keep loss-making banks and enterprises in operation.

3.40 In Bolivia, where hyperinflation raged in 1984-85, the government undertook a profound cut in the fiscal deficit as part of the plan of financial reform. Inflation declined dramatically in the ensuing months and a remonetization of the economy took place. The international reserves of the banking system increased enough so that the government is ready to resume servicing the country's external debt. However, the rapid remonetization and the accumulation of reserves are mostly results of the permission granted to banks to receive deposits denominated in foreign exchange, which now account for about 47% of the banking system's total deposits. The foreign exchange deposits have lifted the foreign exchange constraint temporarily, providing a respite to the government, but they are debts denominated in foreign exchange and therefore will bring serious problems unless sources of foreign exchange income are developed fast. Furthermore, the government still has to solve the grave problem of foreign exchange valuation losses suffered by commercial banks when the government converted the foreign exchange debts of nonfinancial firms to local currency but did not assume the resulting losses, burdening the banks. These losses are now in the books of banks, which cannot absorb them. The government cannot absorb them either, unless it runs fiscal surpluses.

3.41 In summary, a delay in dealing with financial crisis tends to frustrate stabilization efforts while creating incentives for wasting resources much needed for economic recovery. Efforts to attain stable growth without solving the underlying financial problems have produced extremely negative results. Therefore, it seems correct to infer that stabilization and growth can be achieved only through the simultaneous application of measures aimed at solving the financial problem and stabilizing the economy.

IV. SOLVING FINANCIAL CRISES

4.1 The most urgent question that governments face when confronting a financial crisis is whether or not to prevent banking runs. As stated earlier, mechanisms to prevent the bankruptcy of the banking system are a mixed blessing because, while avoiding banking runs, they also prevent market forces from providing a solution to the financial problems through the immediate elimination of inefficient activities and their obligations. If depositors are safe but it is not clear who will bear the losses, the events described in Chapter III unfold, further destabilizing the economy and delaying economic recovery. Because of this, when the first step of protecting depositors is taken, the second step of allocating the part of the losses that would have accrued to them also has to be taken. The second step implies transferring government resources to banks, to their borrowers, or to both.

4.2 This chapter focuses on the decisions that governments must make when confronting a financial crisis. Section A makes the case for government intervention to prevent the bankruptcy of the banking system and Section B examines one of the most common instruments used for this purpose--Deposit Insurance Corporations. Section C discusses the allocation of the losses and the rest of the chapter reviews the macroeconomic implications of absorbing the losses of depositors through transferring resources to the banking system and the general ways in which these transfers can be carried out. Chapter IV discusses a strategy to carry out these transfers efficiently.

A. THE CASE FOR GOVERNMENT INTERVENTION

The Risk of Bank Runs

4.3 Banking has strong externalities because banks' liabilities constitute means of payment. If the public loses confidence in the value of those liabilities, the costs of transactions in the economy increase substantially, reducing or eliminating the benefits of monetization and causing losses that exceed the costs of government action. While the risk of demonetization is low when weak banks manage a small percentage of the banking system's total liabilities, it becomes high when big banks fail and even higher when most of the banking system goes bankrupt.¹⁹ A collapse of the banking system most likely would also cause the demise of perfectly sound firms and banks.

¹⁹ Inflation taxes also cause demonetization; indeed, that is one of the factors that makes them so undesirable. However, the failure of a banking system seems to make a more drastic and lasting impression on economic agents than does the loss of deposits and currency through inflation taxes.

The Scarcity of Entrepreneurs and Managers

4.4 The success of bankruptcies in redirecting the allocation of resources depends to a large extent on the ability of the private sector to absorb and put to good use the good assets of bad debtors. This ability is quite limited in developing countries because entrepreneurial and managerial talents are typically scarce. In such circumstances, the government cannot be sure that liquidating assets will not reduce the country's productive capacity. Furthermore, with only a few potential buyers, the transfer of a substantial portion of a country's assets at very low prices could lead to an undesirable concentration of the ownership of the country's productive capacity which, in turn, could lead to future financial crises.

4.5 Management and entrepreneurial problems are more serious in the industrial sector. In agriculture it is relatively easy to sell foreclosed assets to other entrepreneurs who will exploit the transferred properties with reasonable efficiency. But the ability needed to run an industrial firm requires specialized knowledge, which, in some countries, is confined to a handful of managers and entrepreneurs.

4.6 It has been argued that removing managers and entrepreneurs from across the industrial sector is justified because they have proved to be incompetent. Replacing them even with equally incompetent people would be helpful because that would enforce financial discipline. This argument ignores the major role played in the financial crises of developing countries by misleading economic incentives. It also ignores the fact that many distressed firms once functioned quite efficiently, when economic incentives were right.

B. PRECLUDING BANKING RUNS: DEPOSIT INSURANCE AND GUARANTEES

4.7 The most pressing problem faced by financially distressed countries planning to stabilize the economy is how to avoid a banking run triggered by the failure of banks with serious liquidity problems. In several developed countries, panics are avoided because the losses of insolvent financial institutions are absorbed by reserves built up through deposit insurance schemes. Most developing countries, however, lack these schemes and, in all cases of severe financial crisis, losses are too high to be covered by any reasonably funded insurance institution. In such circumstances, governments are faced with the decision of whether to provide an ex post guarantee of deposits, or to risk a financial debacle. As a rule, governments prefer to guarantee ex post the deposits of

weak banks. Recent examples of institutions benefiting from ex post deposit guarantees include the banking system in Chile, the Continental Illinois Bank in the United States,²⁰ and several banks in Colombia.

4.8 A substantial body of opinion maintains that granting ex post deposit insurance is a mistake. Arguments given to support this opinion are that: (a) it reduces financial discipline and distorts the future allocation of resources; (b) it is inequitable because it forces taxpayers to bear the losses of depositors without having benefited from their gains; and (c) there are ways to avoid demonetization without insuring all deposits, such as insuring only demand deposits or only deposits from small savers.

4.9 There is much truth to the first argument. By bailing out depositors, the provision of ex post deposit insurance distorts the future allocation of resources in the economy because depositors, confident that they are not going to lose their funds in any circumstance, are unlikely to exert control on the management of banks by shifting their deposits to the best managed banks. Instead, they are likely to deposit in institutions paying the highest interest rates, which normally are the riskiest ones. This lack of control becomes more evident during financial crises. The second argument is also powerful, especially when other sectors in the economy are forced to take losses. The third argument about protecting liquidity through ex post insurance of only a portion of deposits, however, is flawed.

4.10 The ability of the economy to make monetary transactions is not protected by the ex post insurance of demand deposits exclusively because different kinds of financial liabilities are close substitutes of each other. Most economic agents maintain only a minimum balance in their current accounts, enough to carry out transactions for only a short period of time, because other deposits, almost as liquid, yield higher interest rates. Financial managers of enterprises, and even personal depositors, transfer funds from higher-yielding instruments to demand deposits just before the funds are needed. If, when banks are about to fail, ex post insurance is granted to demand deposits only, most depositors will confront a severe shortage of liquidity. If the ex post insurance is granted when banks are weak but bankruptcy is not imminent, this step would accelerate

²⁰ Deposit insurance has existed for over five decades in the U.S. Throughout this period, insurance had been limited to depositors holding a maximum of \$100,000 in the insured banks. However, when Continental Illinois was about to fail in the early 1980s, the Federal Insurance Deposit Corporation (FDIC) decided on ex post guarantees to depositors with more than \$100,000, who held most of the bank's liabilities.

the banks' failure because funds not insured and not needed in the medium term would be withdrawn and invested in real or foreign assets, reducing the liquidity of the banking system and creating the environment of a run.

4.11 Insuring deposits of small savers only makes sense if it is provided ex ante (before any crisis) because it encourages large depositors to watch where they deposit their money. But if it is granted ex post it would not protect liquidity because there is no reason to believe that small depositors provide most of the liquidity in the economy. On the contrary, this measure would also precipitate the bankruptcy of the banking system, because large depositors would withdraw their funds to deposit them abroad.

4.12 On balance, given the extremely high cost of bank failures and bank runs, it seems better to grant ex post insurance to all deposits. The wrong signals provided by the rescue of depositors can be substantially reduced if banks are bailed out but bank owners are not.

C. ALLOCATING THE LOSSES

Constraints

4.13 Once the need for government intervention to allocate the losses is recognized, the political, legal, and technical problems of such allocation have to be faced. First and foremost, governments should aim at minimizing the fiscal transfers required to restore the financial health of the country. Ideally, government transfers should not exceed the amount necessary to cover the losses that would have accrued to depositors in the absence of intervention. Therefore, governments must force the current shareholders of debtor firms and creditor banks to absorb as much of the losses as possible, either by injecting more capital in their firms or by reducing their share in their firms' ownership. The basic principle should be that intervention must be aimed at saving banks, not bank owners, and firms, not firm owners. Bank and firm owners must be saved only when, as discussed in Section A of this chapter, their survival is essential for the operation of viable firms or sectors.

4.14 There are some factors that could limit a government's freedom to allocate losses in the least costly way, among them: (a) considerations regarding the social equity of the allocation; (b) the political power of different groups to which the losses could be allocated; (c) the legality of different ways of allocating the losses; and (d) expediency. Equitable and efficient solutions may not be considered politically feasible; also, given the need for speed, it may be necessary to adopt second-best solutions.

4.15 The external debt also poses an important restriction on the allocation of the losses. Foreign creditors are excluded from the list of those who could absorb the losses because the consequences of an international default may be as dire as those of a domestic bank run. Governments have negotiated their debts several times over with their international creditors, obtaining new loans to service the old ones, in a process that closely resembles the domestic banks' response to their borrowers' financial distress. While the build up of reserves carried out recently by Citicorp could start a process in which international banks will formally absorb losses, the international allocation of losses is still an open issue.

Instruments

4.16 The choice of the mechanisms through which resources will be transferred to financially distressed economic agents is a key decision not only because of fiscal equity, but also because the mechanisms affect the size of the transfers themselves and, therefore, the amount of losses that has to be allocated. Governments can choose to make the banks' nonperforming assets good by transferring resources to either banks or borrowers. In both cases, the transferred resources help to solve the banks' problems, either directly or indirectly, by increasing the borrowers' ability to service their debts.

4.17 Transfers to either banks or borrowers can be effected across the board (for example, by subsidizing refinancing of all credits meeting certain requirements, by condoning specified categories of debts, or by purchasing the bad portfolio of all banks), case by case, or through a combination of the two. Most of the mechanisms for transferring resources can be used in both the across-the-board and the case-by-case approach. The difference between the two approaches is the discrimination exerted in deciding who the beneficiaries are and how much relief is to be provided to each of them.

4.18 The across-the-board approach has been tried by several governments because it gives the appearance of being faster than the case-by-case approach. It is also politically appealing because it makes it easier to conceal who is receiving the benefit and who foots the bill. In some cases, governments have forgiven part or all of the debt of some sectors. These cases, however, are exceptional. Most governments using the across-the-board approach usually transfer resources to both banks and borrowers by providing subsidized credit lines and by establishing preferential exchange rates for the repayment of loans denominated in foreign exchange.

4.19 The across-the-board approach is quite inefficient. It tends to maximize the amount of government resources required to solve the financial crisis. There are two reasons for this; first, a good portion of the relief goes to agents who do not need it, providing a windfall gain to those debtors; and second, another substantial portion of the relief goes to agents that are not viable regardless of the amount of transfers they receive. If transfers are designed to help the average debtor, for example, they would provide various degrees of windfall gains to half of the debtors while leaving unsolved the problems of the other half.

4.20 Even more important, the reduction of the financial burden of viable firms and banks is a necessary, but not a sufficient, condition for the recovery of the economy. Typically, firms and banks in financial distress also need different degrees of restructuring. Such restructurings are not independent of financial relief schemes and cannot be approached in a wholesale way.

General Strategy

4.21 While an across-the-board approach is too costly and inefficient, a case-by-case approach may prove too slow because of the large number of firms in need of restructuring. To speed up the process, the government should decentralize it as much as possible, establishing incentives for the needed restructurings and getting involved only in those restructurings that nobody else can carry out. In this vein, the government can use banks both as mechanisms to provoke the complex restructuring of nonfinancial firms and as vehicles to concentrate the losses in a limited number of financial institutions. In restructurings of financial institutions, however, the government may be forced to play a more active role because it is the only agent that can assume the share of the losses that bank shareholders cannot absorb. Using this strategy, the government would transfer resources only to banks, strengthening them to withstand the write-offs needed for the restructuring of debtor firms.

4.22 In addition to expediency, there are two other powerful reasons why the government should limit its participation in the restructuring of nonfinancial firms to that of a facilitator. First, if the government becomes involved in restructuring decisions that entail reducing the financial burden of debtors, bankers can reasonably argue that they are not responsible for actions forced on them and, therefore, that the government should compensate them for the losses resulting from the negotiations. Second, restructurings are likely to be negotiated more thoroughly, and therefore more efficiently, if they are carried out by private agents exclusively because the gains of some negotiators will be the losses of the others.

4.23 Therefore, the government should create incentives to provoke a process of debt renegotiation between debtors and creditors. Such a process should force entrepreneurs to take their share of the losses, eliminate unviable concerns, reduce the financial burden of viable debtors, and transfer the remaining losses to the financial system. At the same time, the government should recapitalize the banking system.

D. MACROECONOMIC POLICY AND RECAPITALIZATION OF THE BANKING SYSTEM

Nominal Domestic Demand

4.24 The two objectives of stabilizing the economy and creating an environment for economic recovery are consistent in the medium and long term because no sustainable growth is achievable in an unstable environment. In the short run, however, stabilization requires a contraction, which is likely to affect economic growth negatively. Furthermore, since the continued losses of the financial system are commonly the single most important factor in boosting monetary creation, governments should include the recapitalization and improvement of the profitability of banks in their stabilization efforts.

4.25 Recapitalizing the banking system requires a transfer of real resources to banks, and thus seems to run counter to the objective of contracting the overall growth of nominal domestic demand. The contradiction, however, is only apparent. A recapitalization of weak banks would not increase monetary creation because the banking system's losses already exist and are being financed with the monetary expansion used to keep insolvent firms in operation. Instead of financing the insolvent firms, a comprehensive program of recapitalization of banks would finance the needed write-offs. This action would cut the links that currently force banks to lend to inefficient enterprises, thus stopping the growth of losses and turning weak banks into profitable institutions. If successful, such a program would eliminate one of the main sources of macroeconomic instability.

4.26 Since the net result of the macroeconomic policies should be contractionary, expenditures on activities that have less priority than the recapitalization of the banking system should be curtailed; that is, subsidization to insolvent borrowers should stop. This would liberate resources to recapitalize the banking system, to reduce the rate of growth of nominal domestic demand, and to allocate resources for investment and growth in the private sector. In countries where central banks are suffering valuation losses, reducing government expenditures would have a double benefit. First, it would allow central banks

to absorb losses without generating inflationary pressures; second, by cutting the rate of inflation, it would diminish the need for devaluation, reducing future losses.

Speed of the Process

4.27 The recapitalization of banks must be done quickly to reduce uncertainty and remove the negative effect of the crisis on the stabilization efforts. However, the transfers, and their financing, can be carried out gradually, spreading the cash flow over several years, recapitalizing the banks with government debt at market interest rates. Mechanisms to carry out such a recapitalization are discussed in Chapter V. In most countries, the annual cash flow should not exceed 2% of GDP, which represents the service (interest plus amortization) of a stock of debt equivalent to 25% of GDP at real interest rates of about 5% over 20 years. This is enough to cover even a loss of 50% of the portfolio of a banking system with credits amounting to 35-50% of GDP. A fiscal contraction of 2% of GDP, however, is a drastic adjustment, especially when other adjustments of the same or larger order of magnitude are being carried out as part of an orthodox stabilization policy.

Impact on the Private Sector

4.28 Intended to reduce domestic demand, a contraction in government expenditures would impose hardship on the private sector. However, unlike tax increases, entrepreneurs can avoid this hardship by exporting or by substituting imports. The shift toward exports is, of course, difficult and takes time, but it is something that distressed countries cannot avoid. The restructuring strategy should be accompanied by other measures, on both the macroeconomic and the sectoral levels, to promote exports.

E. STRUCTURAL REFORM

4.29 In most countries in financial crisis, macroeconomic adjustment must be coupled with structural reform because enterprise restructuring would do no good if undertaken in a highly distorted economic environment. The nature and degree of the required structural reform will vary with the country. In general, the measures must seek to increase the role of the market in allocating resources.

4.30 Too fast a liberalization, however, could prove to be unfeasible, even negative. However distorted, an established economic system performs an immense variety of functions that are easy to overlook when planning the transition to a radically different system. Once the old structure is removed, the institutions needed to carry out many of these functions in a more liberal economy

are unlikely to exist. Also, the liberalization of some sectors can be frustrated by distortions existing in others. For example, domestic restrictions on trade can frustrate the beneficial effects of external trade liberalization. As a result, chaotic situations could develop after a too ambitious structural reform.

4.31 Furthermore, even if it were possible to plan for the performance of all the required functions in the economy, the implementation of sweeping reforms is likely to get out of control, both because people need time to become familiar with new ways of doing things and because the management abilities needed to give a sense of direction to radical changes can exceed the country's institutional capabilities. This is especially dangerous in countries where the government capacity would already be strained by the restructuring effort.

4.32 Therefore, the structural reforms attached to a restructuring program should aim at attaining only the liberalization essential to stabilize the economy and render the productive sectors viable. Once this objective is attained, further structural reforms can be carried out more gradually.

4.33 In summary, the extremely negative consequences of banking runs make it desirable to intervene to maintain the integrity of the banking system. Such intervention, however, makes it necessary to intervene further to extinguish uncollectible obligations and liberate resources for economic recovery through what has been called the allocation of the losses. In allocating the losses, the government should aim at decentralizing the restructuring of debtor firms while involving itself directly only in the restructuring of the financial sector. To mobilize the resources needed to restructure financial institutions while reducing the rate of growth of nominal domestic demand, the government should reduce its expenditures on items of lower priority.

V. RESTRUCTURING

5.1 The primary objective in restructuring is to reallocate real resources in accordance with a sustainable structure of relative prices, so that economic growth can resume. The complementary objective is to strengthen the financial system so it can withstand the capital losses it will suffer as a result of such reallocation, without transferring those losses to depositors. Governments should be aware that restructuring is a long and messy process that will require taking many decisions based on scant information. Restructuring a single major bank takes years even in a developed country, as the case of Continental Illinois shows. In a developing country with several insolvent banks, the process could take even longer and amounts to a structural adjustment. The only justification for carrying out such a difficult process is that the alternatives are worse.

5.2 The strategy suggested above, decentralizing the restructuring of debtor firms while intervening directly in the restructuring of the financial sector, is general enough to be implemented in any country. The particulars of this implementation, however, will vary with the gravity of the crisis and the institutional characteristics of each country. Section A of this chapter presents a stylized program of restructuring that presupposes the existence of relatively sophisticated financial institutions. In countries where such institutions do not exist or financial markets are too shallow, the strategy could consist of mimicking through government intervention what the market would do. Some ideas on such a mimicking are discussed in Section B.

A. A RESTRUCTURING STRATEGY FOR COUNTRIES WITH RELATIVELY WELL DEVELOPED FINANCIAL SYSTEMS

Restructuring Debtor Firms

5.3 Debtor firms and their bankers will not agree to absorb losses unless they are convinced that they have no other choice and that it is in their best interest to stop rollovers. The best way to force both parties to restructure their operations is to put pressure on the banking system to either collect their loans or write them off. This action would break the collusion of debtors and creditors that is one of the main obstacles to restructuring, setting in motion a process that would end up with the renegotiation of all debts.

5.4 To break the collusion between creditors and borrowers, a package of incentives should include measures that force the write-off of bad loans or, when a restructuring has taken place, the write-off of the portions of bad debts that cannot be recovered; and measures that upgrade the classification of the remaining portion of restructured debts if bank examiners are satisfied that the restructured firms are financially viable.

5.5 Firms cannot achieve sustained growth if the service of their debts is higher than, or equal to, their cash generation. Cash sufficient to obtain financing for replacing equipment and for investing in the elimination of bottlenecks and on growth should stay with the company. Therefore, estimating the size of the financial burden that must be removed to restore the health of a company should start with a projection of the cash that the company's assets can generate in a given period, say ten years. From that amount, internal resources needed for equipment replacement and new investment should be deducted. The present value of the remaining cash flow, discounted at the current interest rate, is the amount of debt that the company can service. The difference between the current stock of debt and this present value must be eliminated.

5.6 In countries with potential for developing capital markets, reducing the financial burden of viable debtors can be carried out by writing off bad debts, and by using instruments that allow banks to participate in the restructured debtor's future profits and cash generation. The second category of instruments has several advantages. If restructured firms recover and grow, the additional cash they generate would reduce the banks' long-run losses. Moreover, this approach would give banks an incentive to restructure the ailing firms thoroughly because collecting the capitalized portion of the debt would depend on the firm's future success. Substituting debt for equity, however, could transfer the ownership of a substantial portion of the productive sectors to the banking system. This would lead to serious conflicts of interest in credit decisions and could result in another debt crisis in the medium term. These risks should be reduced by forcing the banks to sell their ownership claims within a reasonable period, say two years.

5.8 The use of quasi-equity can also help to reduce these problems. In order to be useful in restructurings, quasi-equity instruments should be: (a) subordinated in both service and repayment of principal (that is, the service and repayment of these instruments would be contingent upon the availability of resources to first service more senior debt); (b) convertible into shares after a specified period (five to ten years) at a predetermined price per share; and (c) negotiable. The interest rate on the loans backed by these instruments should be very low or zero. These instruments could be made convertible into nonvoting or preferred stock or, alternatively, banking regulations could prevent conversions by financial institutions. In this way, these institutions would be able to obtain the eventual capital gains only by selling the instruments to other parties.

5.9 The use of equity and quasi-equity instruments also presents a difficult problem of valuation. Since bank examiners do not have a reliable way to value these shares in the banks' assets, the estimation of the losses, and therefore of the amounts needed to recapitalize weak banks, is subject to larger errors when these instruments are used than when they are not. This delays the process of recapitalization because the ultimate extent of the losses cannot be estimated. Therefore, the shorter the period that banks are allowed to keep these shares, the better. On the other hand, too short a period could be unfair to banks because restructured firms need some time to prove that they have become profitable. On balance, it seems advisable to allow banks to hold shares for a period not exceeding two years, as suggested above. In the interim, shares should be valued in accordance with conservative criteria, the goal being to have banks carrying them on their books at prices close to zero.

5.10 Since firms are typically indebted to several banks, the simplest solution would be to have a leading bank (the one most exposed to the respective firm) conduct the negotiations with debtors, and to link all debts of any given firm through cross-default clauses. Under this decentralized framework, bankers would decide on priorities, then allocate the most time and their most qualified executives to the more important debtors. The restructuring of less important debtors could be negotiated by lower executives more quickly, in accordance with rules adopted for the purpose.

Restructuring Banks

5.11 Some banks will not be able to absorb their losses without failing. The government must decide whether to liquidate them, take them over, or negotiate a restructuring plan with the shareholders, which should include the absorption of losses by these shareholders. The outcome of this decision will depend on the gravity of the condition of individual banks, on the number of weak banks, and on the ability of the government to manage banks. In Chile, where all but one of the local private banks had lost more than twice their equity capital, the government decided to take over only the worst five and recapitalize the rest through a wholesale scheme that saved the banks but forced their shareholders to take most of their losses (para. 5.23).

5.12 Recapitalization can be carried out through different mechanisms, all of them variations of three main schemes: (a) increasing the profitability of financial institutions; (b) purchasing newly issued equity; and (c) purchasing the bad portfolio at face value. In most cases, the best solution will be a combination of the three.

5.13 **Increasing the Profitability of Banks.** Instruments used to improve the profitability of financial institutions, creating artificial conditions for profits to rise, have already been discussed in Chapter III (paras. 3.22-3.24). Their use is not advisable. Controlling interest rates to increase the spread or extracting high inflationary taxes to transfer the proceeds to banks are inefficient policies that tend to exacerbate the problem rather than solve it.

5.14 There is some scope, nevertheless, to help in the recapitalization of banks by removing distortions that reduce their profitability. The main actions that can be taken to attain this objective are to lower legal reserve requirements and forced investments, both of which reduce the profitability of

a portion of a bank's portfolio.²¹ Increasing the profitability of banks by eliminating these distortions can, however, prove to be an elusive goal because banks normally compensate for them by increasing the spread on other operations. In those cases, reducing forced investments or legal reserve requirements results in spread reductions, not in increased profitability.²²

5.15 Furthermore, a careful distinction must be made between legal reserve requirements and forced investments. Reductions in legal reserve requirements increase the multiplier of the banking system, thus increasing the effect of reserve money creation on nominal domestic demand and lessening the central bank's ability to finance the government with a given amount of monetary creation. Therefore, they can be safely reduced only in combination with a simultaneous contraction of the fiscal deficit or a shift of government sources of financing toward open market operations. Forced investments, in contrast, can be reduced without monetary impact, provided that the rediscounts they finance are reduced simultaneously. Reductions of forced investments, and the rediscounts they finance, could be difficult if rediscounts have long maturities.

5.16 This discussion should not be interpreted as an argument to keep legal reserve requirements and forced investments at excessive levels but as a warning that reductions should be carried out carefully and that they may not result in improving the profitability of banks. Lower spreads help in reducing financial distress because they lower the loan interest rate that banks have to charge at any given deposit rate. Also, reductions in forced investments reduce market fragmentation and improve the allocation of resources.

5.17 **Purchasing Newly Issued Equity Shares.** This is the more direct way to recapitalize banks. Ideally, the new shares should be bought voluntarily by private investors. However, to sell shares of a bank in the process of writing off its equity capital may be impossible. In these circumstances, the government may perform the role of intermediary, purchasing the shares, cleaning up the bank's portfolio, and then selling the shares of a newly healthy bank to the

21 The terms "legal reserve requirements" and "forced investments" are used in the text to distinguish between two types of deposits that banks have to keep with central banks. Both detract from the funds available to banks for investment, but their use by central banks is different. Legal reserve requirements are sterilized and, therefore, give room for central banks to finance government deficits. Forced investments are returned to the banking system to finance specific activities, at preferential interest rates and maturities.

22 The profitability of banks will increase only to the extent that they have oligopolistic power. Otherwise, competition will reduce the spread.

public. If the bank has lost more than its equity capital, the government will take a loss. To minimize such a loss, the government should purchase the shares only after forcing the required write-offs.

5.18 Purchasing the Bad Portfolio. If the weak bank has lost substantially more than its equity capital, recapitalization through the purchase of equity shares exclusively would leave the bank with a low debt-to-equity ratio, which would impair its profitability. In these cases, portfolio purchases are the more expeditious instrument. As in the case of the purchase of newly issued shares, the government should proceed with the purchase of the bad portfolio only after forcing the banks' owners to take their share of the loss. This can be accomplished if the government has already purchased the bank through the process described in the previous paragraph. The same result can also be obtained in other ways. In Chile, the government purchased the bad portfolio of most banks under a scheme that forced bank owners to take a portion of the losses without having to nationalize the banks (para. 5.27-5.28).

5.19 The government should purchase the worst portion of the portfolio, that with a very low probability of collection. Otherwise, the purchase would not fulfill its objective of substituting good for bad assets in the banking system. The purchase should be carried out, therefore, only after the bank has gone through the restructuring of its customers' debts and the uncollectible part of their obligations has been identified.

5.20 Form of Payment. The best way to pay for the recapitalization of banks is through long-term negotiable government bonds paying floating market interest rates. Such bonds should provide income slightly lower than that of loans, so that there is an incentive for banks to gradually sell them to the public to get resources for lending. The macroeconomic impact of these instruments is discussed in para. 4.27.

5.21 Management Restructuring. To ensure the strengthening of the financial system, it is necessary to force the restructuring of the financial institutions themselves as a requisite for helping in their recapitalization. It is not enough that the owners of financial institutions take their share of the losses. Also, the managers of banks in serious distress should be removed, even if their institutions are not taken over by government agencies.

5.22 The issue of the management of banks is different from that of firms on the real side of the economy (paras. 4.4-4.6), both because the reasons for replacing them are stronger and because their replacement is easier. When a financial institution gets in serious trouble, a style of management (concealing losses, disregarding prudent financial practices) emerges that is impossible to

correct without removing the managers. The problems posed by bringing in new managers in the financial sector are less severe than in the industrial sector because, typically, the number of failed banks is much smaller than the number of debtors, and because managing one bank is quite similar to managing the next one.

5.23 Even if these factors make it more desirable and more feasible to remove the top managers of financial institutions than to remove their counterparts in industrial firms, the substitution of all the top managers of weak banks could prove inconvenient or impossible in cases of widespread solvency problems. In Chile, for example, this would have entailed the removal of the top executives of all locally owned private banks except one. The government decided to remove the managers of only the five worst banks while forcing administrative restructurings through the superintendency of banks.

5.24 **Government-Owned Banks.** In several countries, government-owned banks are among the weakest financial institutions because they have acted more as channels to convey subsidies and political favors than as financial concerns. Solving the financial crisis requires either liquidating these banks or turning them into efficient, profitable institutions. To accomplish the latter objective, it is necessary: (a) to make the managers of banks accountable for their banks' profitability and discard the use of banks as generators of subsidies; (b) to force the banks to use internationally acceptable accountancy criteria in determining both the quality of their portfolios and the income these portfolios generate; and (c) to improve profitability through better management and through ensuring that managers have complete freedom in administering their assets.

The Concentration of Losses

5.25 As a result of bank recapitalizations, the government would end up owning substantial assets, which can comprise bank shares and a sizable non-performing portfolio. The market value of these assets will be considerably lower than their book value, the difference being the loss absorbed by the government. Ideally, such a loss should be equal to the amount needed to protect depositors exclusively. The government must then decide what to do with these assets.

5.26 In the case of shares, the government should sell them to the private sector as soon as possible. In the case of bad loans, the government has three alternatives: to keep them and try to collect as much as possible; to sell them to private investors; and to sell them back to the banks' owners under a repurchasing agreement with a long-term maturity. Of the first two courses of action, the second is the preferred one because governments do not have a

comparative advantage in collecting difficult loans. The third alternative is qualitatively different from the other two because, in the long run, it attempts to pass the cost of restructuring back to the banks' owners and, unlike the purchase of shares, can be applied across the board.

5.27 The third option was the one adopted in Chile to deal with the banks that the government decided not to take over.²³ The owners of banks benefiting from the central bank's purchases of bad loans committed their share of future profits to repurchasing those loans from the central bank, at face value, thereby promising to absorb the losses incurred by the central bank. The repurchasing obligation does not affect the banks' balance sheet because it is burdened on their profits, which are, in any case, liable to be distributed as dividends. To avoid stopping the growth of banks, the scheme did not impose the repurchasing obligation on new shares issued after the recapitalization was completed. While the market price of the old shares, which will not generate profits for decades, fell to almost zero, new shares are attractive because they are not encumbered. The profits of banks will be allocated proportionally between old and new shares; those accrued to the new shares will be distributed as dividends, whereas those accrued to the old shares will be used to repurchase the bad debt from the central bank.

5.28 The Chilean scheme was favorable to the original shareholders because it allowed them to keep a share of the banks' ownership; in contrast, a direct government intervention after forcing write-offs would have eliminated their claims altogether (since losses exceeded the book value of equity). At the same time, the scheme imposed an obligation on the shareholders to cover 100% of the losses, even though their ownership responsibility was limited to the size of the equity capital. Furthermore, the normal growth of banks through new equity issues will dilute the share held by the original owners. There is a danger that, if the original owners continue to manage the bank, they will try to extract income from the banks. This danger can be reduced with strict supervision and by encouraging the incorporation of new capitalists into the restructured banks, something that can be achieved through enforcing maximum debt-to-equity ratios.

Institutional Aspects

5.29 A successful restructuring program needs a substantial institutional basis, which may not exist in developing countries. The institutional changes that are most commonly needed are: (a) establishing prudential regulation and

²³ The solution applied to the intervened banks was a combination of this scheme with the purchase of shares by the government. The shares were subsequently sold to private investors.

supervision to force banks to take their losses; (b) revamping bankruptcy laws to force debtor firms to take their losses; (c) establishing an agency to handle bank restructurings; and (d) developing capital markets to unload the securities generated by restructurings.

5.30 **Prudential Regulation and Supervision.** Legislative changes are needed in some countries to force banks to take the losses and initiate the restructuring process. To induce restructurings, banking regulations should set up strict norms for the classification of loans by quality; force banks to stop accrual of interest on nonperforming loans after 90 days of arrears; and establish a clear procedure for building up adequate provisions for writing off bad loans. Also, in most countries, measures are needed to improve supervision. Supervisory agencies should be given the power to enforce regulations, including powers to remove bank managers and members of the board. In addition, the skills and training of supervisors should be improved, and a good information system to monitor banks should be established.

5.31 **Bankruptcy Laws.** Another common obstacle to restructurings is the desire to protect debtors excessively. Bankruptcy laws commonly include provisions to protect financially distressed firms from their creditors, allowing them time to reorganize themselves and renegotiate their debts. If, at the end of this period, the firm does not become viable, bankruptcy procedures are initiated. The principle behind such legislation is sound, but the risk is that debtors can stop payments for a prolonged period without having to increase their efficiency and without reaching an agreement with their creditors. As a result, financial discipline is weakened and restructurings become difficult. In such cases, the protection of debtors against creditors must be reduced.

5.32 **The Deposit Insurance Corporation.** The agency in charge of bank restructurings should be managed by the government in a decentralized fashion, without the bureaucratic encumbrances of central government institutions. They should be able to take over, recapitalize, and sell banks back to the private sector without nationalizing them in the process. Deposit insurance corporations are among the most effective agencies to handle restructurings of financial institutions because they can operate under private sector laws. Creating such a corporation to handle a banking crisis has the double benefit of preventing bank runs and providing an institutional instrument to restructure the banks.

5.33 To perform bank restructurings, a deposit insurance corporation should have several characteristics. It should insure deposits of both government-owned and private banks so it is able to restructure both. It should have the power to take over the management of weak banks, both private and government-owned.

In the case of private banks, it should also be able to become the owner. Finally, it should be forced by law to sell back the restructured private banks to the private sector.

5.34 **Capital Markets.** The process of restructuring described in the previous paragraphs would generate a substantial amount of securities, some of them issued by debtor firms and the rest by the restructured banks. Considering the small size of capital markets in even the most sophisticated developing countries, unloading these securities can be expected to be a major task.

5.35 The shares of restructured banks are better handled through private placements controlled by the deposit insurance corporation or by an equivalent government agency in charge of bank restructurings. The natural purchasers of the shares of banks are healthy banks interested in merging with the restructured banks.²⁴ If there are no domestic banks available for mergers, the government can try to entice international banks to purchase the restructured banks. If these efforts fail, the government may try to sell the banks to newly formed banking corporations. To promote these operations, the government normally has to offer good selling conditions and provide long-term financing. In Chile, for example, the government sold the shares of restructured banks to income tax payers at heavily subsidized prices.

5.36 Unloading the shares of restructured companies poses a more complicated problem because of the number of companies and the amounts involved. In some countries, there is an incipient capital market that can be strengthened to handle at least a portion of the securities that become available through restructurings. Capital markets in developing countries are often weak because the tax structure discriminates against equity share investments and because the rights of minority shareholders are not adequately protected. In addition, institutional investors are lacking because pension funds are managed by the state and life insurance companies are forced to invest in government documents. Taking measures to solve these problems may help to increase the size of the market, which would also be enhanced by the possibilities of large capital gains in buying shares of restructured companies.

B. ALTERNATIVE SCHEMES FOR COUNTRIES WITH LESS DEVELOPED FINANCIAL SYSTEMS

5.37 In most countries, the development of capital markets may take too long for them to play a significant role in restructurings. Also, negotiations

²⁴ Some mergers between restructured banks may be necessary in order to reduce the number of institutions that have to be sold back to the private sectors and to improve their efficiency. These mergers can be carried out by the agency in charge of the restructurings.

between debtors and creditors may be complicated in countries where the government owns both of them. Furthermore, in some countries, banks may lack the sophistication required to negotiate restructurings. In such cases, the suggested restructuring strategy may need to be substantially modified.

5.38 In countries that are financially less sophisticated, the sale of equity or quasi-equity instruments may be impossible. The government may instead choose one of two options: to discard the use of these instruments in restructurings, or to acquire them from banks as part of the banks' recapitalization program and give them away to taxpayers.

5.39 Another solution that is sometimes recommended is for the government to keep the shares through a state-owned holding company. This solution is risky, however, because the government would then hold a large share of the ownership of the productive sectors. The pressure to protect these companies from market risks could prove great. Should the government give in to those pressures, it could render useless the whole restructuring exercise.

5.40 Still another alternative could be for banks to acquire equity or quasi-equity instruments under repurchasing agreements similar to those used in Chile for the recapitalization of banks (para. 5.27). This option should be used cautiously, however, because it can create strong incentives for companies to falsify financial statements and to transfer assets to new, unencumbered companies. While this problem is manageable with a limited number of banks, it may be beyond control when dealing with a large number of debtor companies.

VI. CONCLUSION

6.1 The financial distress that has been the subject of this paper has had no precedents since the 1930s, either in terms of the gravity of individual cases or in terms of the number of countries affected. The emergence of these problems and their concentration in countries that have followed an inward-oriented strategy of development suggest that such a strategy is becoming unviable in the modern world.

6.2 Financial distress arose as a result of the increasing inability of countries to maintain structures of protection that severely distorted relative prices. Devaluations and scarcities of imported inputs turned unprofitable a substantial portion of the assets of these countries, causing considerable capital losses that were reflected in a deterioration of the quality of the banks' portfolios. Both the internal dynamics of protectionism and international developments contributed to these events.

6.3 Protectionism proved unstable because it resulted in the following chain of events: (a) it gradually led to balance-of-payments problems because it discouraged exports while encouraging imports of production inputs; (b) protectionism made production a function of domestic demand almost exclusively, which put pressure on governments to try to maintain high rates of growth for this demand, regardless of the balance-of-payments problems; (c) high rates of growth of nominal domestic demand led, initially, to large external borrowing and, when foreign credits were not available, to high rates of inflation; and (d) through this process, high rates of nominal domestic demand also led to low rates of real production because they caused the balance-of-payments problems, and, therefore, the resulting shortage of imported inputs needed for production. As a result of such dynamics, countries following strategies that were too protectionist were bound to have financial problems, even in the absence of external developments.

6.4 International developments also made it more difficult to maintain distorted structures of relative prices. Some of these developments were circumstantial, like the pronounced cycle that has characterized commodity prices and international interest rates since the early 1970s. Others are structural, the result of the growing internationalization of the world economy, the rapid development of technology, and the shift in consumption patterns that is occurring, in part because of the technological revolution, in the largest markets in the world. It seems that commodities are becoming an inferior good as a growing portion of the developed economies' income is being spent in high-tech consumption and investment goods.

6.5 Excessive levels of external indebtedness, the result of the domestic problems described in the previous paragraph, delivered the main blow to the inward-oriented model of development. Countries need to generate foreign exchange not only to service the large debt but also to pay for imports of investment goods that formerly were financed with external borrowing. To service the debt and finance economic growth, protection has to be reduced and economic integrated into the world markets.

6.6 While the capital loss caused by shifts in relative prices cannot be avoided because it has already occurred, distressed countries can keep the losses from swelling by stopping the allocation of resources to unprofitable activities and by creating the right conditions for resources to flow to activities that could spur economic recovery. If countries try to ignore the original capital loss, however, losses are increased and recovery is delayed because efficient companies are crowded out by inefficient ones.

6.7 This paper carries two important messages. The first is that the solution to financial distress consists of recognizing the losses explicitly and of allocating them. Through this process, the links existing between banks and inefficient enterprises are cut, thereby allowing resources to flow to profitable activities. This process should be accompanied by structural reforms to ensure that the new activities will be competitive internationally and to enhance the flexibility of the economy in adjusting to changing international conditions.

6.8 The second message is that the ultimate cause of financial distress, the failure of the distressed economies to adapt to changing circumstances, is evident in several countries that are not suffering from macroeconomic instability. These countries are following a path similar to the one followed by those now in distress: the maintenance of excessively high rates of growth of nominal domestic demand, financed with external borrowing. The high rate of growth of nominal domestic demand is, to a large extent, the result of government efforts to keep inefficient firms and activities in operation. If the governments of these countries do not take corrective action in time, they too will be faced with financial crisis.

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